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Inner City Safety Demonstration Project

Technical Report

Department for Transport

March 2011

QM

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INTRODUCTION

This document represents a comprehensive evaluation of the Inner City Safety Demonstration Project (ICSDP) delivered by Birmingham City Council through grant funding from the Department for Transport (DfT). The report provides a detailed commentary on the approach adopted, the challenges faced and the lessons learnt. As a demonstration project it was also evaluated in detail, assessing not just the commonly assessed casualty reduction benefits but looking at a broader range of quantitative and qualitative measures of success.

THE HIERARCHY OF DOCUMENTS

The main report (Inner City Safety Demonstration Report) presents the key findings of the whole study, drawing heavily on this document. The conclusions reached here are based on:

1. The Academic Research Report undertaken by Birmingham University.
2. A baseline data report undertaken by the Transport Research Laboratory (TRL) at the start of the project.
3. Data provide by Birmingham City Council and summarised in this Technical Report.

Item 1 is provided as a standalone document on the DfT's website whilst item 2 is attached as an Appendix to this report.

OTHER INFORMATION

The report draws heavily on a series of face-to-face interviews undertaken by the University of Birmingham and members of the project team and a broader range of partners within the Council and affiliated organisations.

The interviews were undertaken with individuals on the clear basis that they would be un-attributable and edited so that it was not possible to identify individuals by inference. This means that all quotes (in italics in the text) are anonymous.

1 Introduction

The Inner City Safety Demonstration Project is part of a family of Department for Transport sponsored road safety demonstration projects, each conceived to address specific road safety issues. As the last major project to be identified, it was very much seen as the final stepping stone in tackling road safety in difficult environments with the considered the 'ultimate challenge'.

1.1 PROJECT BACKGROUND

1.1.1 The project aimed to treat the complex road safety challenges of inner city Birmingham through a combination of route treatments, standalone projects and area-wide Education, Training and Publicity (ETP) activities.

1.1.2 It aimed to draw upon the experience and learning of the projects that came before it but to be delivered in a different context. The parallels with previous demonstration projects are significant and this provided an opportunity to validate or challenge conclusions reached on other projects. As in the earlier Neighbourhood Road Safety Initiative (NRSI) project, the Inner City Safety Demonstration Project (ICSDP) addresses the issues arising from the link between deprivation and road casualties demonstrated. This link was identified by the work of the Institute for Public Policy Research, the Office of the Deputy Prime Minister and the Social Exclusion Unit[1]. For example, children from the lowest socio economic group (SEG) are five times more likely to be killed as pedestrians than their higher SEG counterparts.

1.1.3 Table 1.1 below provides an overview of all of the projects, the issues addressed and the approaches taken to tackle these issues.

[1] Streets Ahead, Safe and liveable streets for children, IPPR, 2002

Table 1.1: DfT Road Safety Demonstration Projects

Project	Issues	Approach
Neighbourhood Road Safety Initiative	Disproportionately high casualty numbers in areas of high deprivation.	Combined programme of Education, Training & Publicity (ETP) initiatives with small scale engineering schemes to provide area-wide casualty reductions.
Mixed Priority Routes Road Safety Demonstration Project	High numbers of casualties on mixed use streets (commonly arterial routes with wide range of frontage activity) with no defined pattern or clusters for standard interventions	Route based engineering schemes encompassing a number of common features, including: reallocation of road space; improving accessibility for vulnerable road users; and improvements to public realm.
Rural Road Safety Demonstration Project	Higher than average casualty numbers on rural routes	A mixture of engineering schemes and ETP initiatives driven by detailed data analysis for identification of issues.
Inner city safety demonstration project	Disproportionately high casualty numbers in inner city areas	Area wide treatment driven by a core of targeted engineering schemes in problem areas, including route treatment, area wide traffic calming and targeted minor works with complementary ETP initiatives.

1.2 REPORT CONTEXT

1.2.1 With the ICSDP encompassing a range of approaches with which to draw parallels to other demonstration projects, comparisons will provide additional insight to the assessment undertaken thus far in terms of their effectiveness. There are a number of elements of particular relevance and interest:

See chapter 10 for further information on how the Inner City project compared to earlier demonstration projects in terms of spend and casualty reduction.

- **ICSDP Route Treatment Projects & Mixed Priority Route (MPR) Schemes.** The ICSDP project had a budget of £6m to deliver casualty reductions in an area with a population of 80,000. The effect of budgetary limitations meant that Birmingham City Council (BCC) delivered their route treatment projects at a drastically reduced unit cost in comparison with those developed under the Mixed Priority Routes project. Comparing ICSDP and MPR allows an assessment of whether low cost solutions can deliver similar improvements in road safety and perception.

- **Effectiveness of Education, Training and Publicity.** Bradford Metropolitan District Council (BMDC) delivered a wide range of ETP initiatives as part of the NRSI with supporting engineering interventions being developed in response to the findings of these projects and developed in conjunction. With the Bradford project area being very similar to the Birmingham project area in terms of demographics, infrastructure and casualty problems, it has been selected as a control site for comparison. In conjunction with a control site in Coventry, where there have been no specific interventions beyond on-going city-wide schemes such as the delivery of Kerbcraft training, there is an opportunity to provide a broad assessment of the potential impact of ETP versus an engineering driven approach in comparison with a similar area with no site-specific interventions delivered.

- **Cumulative Impact of targeted small scale engineering works.** With a large proportion of funding for the ICSDP being put into route treatments and area treatments, the final key component of targeted minor interventions (particularly minor junction treatments) can be assessed in comparison with Bradford. Birmingham developed these schemes following detailed analysis of accident data and also in response to initial feedback from the public. Bradford identified schemes in response to consultation and the findings of early stage ETP scheme development to augment accident data analysis. Analysing the impact of the schemes in Birmingham is difficult (with a need to disaggregate data from the route /area treatments), but allows a comparison of more traditional targeted road safety engineering work with schemes driven more by ETP and consultation findings (likely to have comparatively high costs as a result of the scale of consultation and engagement in these projects).

1.3 SCHEME OBJECTIVES

1.3.1 As well as delivering the core aim of reducing road casualties there was a desire from both DfT and BCC to develop a scheme that addressed the wider social and economic aims of inner city areas in Birmingham and elsewhere. Core objectives were established for the ICSDP by the project team at BCC in agreement with DfT. These objectives are summarised as follows:

- **Objective 1**: To have a measurable impact on road safety in actual and perceived terms. This primary aim was linked to DfT's UK road safety strategy casualty reduction targets (expired December 2010).

- **Objective 2**: To integrate road safety activity into the regeneration and other agendas and build partnerships for delivery. This sought to see how through improved working across organisational barriers enhanced outcomes could be achieved.

The development of clearly defined objectives (beyond road safety) is a means of ensuring the project teams maintain focus on the key aims of the project.

- **Objective 3**: To secure inclusive engagement and participation with a diverse community, and influencing local views about road safety. This reflected a wider aspiration of the Council to use its activities to engage with the community.

- **Objective 4**: To improve accessibility to jobs, services and leisure opportunities. Reflects the challenge of ensuring that investment in a variety of improvements could and should enhance life chances for the local community.

- **Objective 5**: To improve quality of life; a safer, vibrant, more stable community. Aligned with wider aspiration to improve opportunities and social cohesion in a very distinct part of Birmingham's community.

1.4 CONTROL SITE COMPARISONS

1.4.1 In complex inner city areas there may be many factors that influence road safety and other local issues over time. In order to eliminate some of these national trends it is vital to identify control sites of a similar nature. Comparative assessment of the casualty records in these areas and those recorded for the ICSDP study area will allow conclusions to be reached on the efficacy of the interventions.

Control sites provide a good basis to measure success but have been particularly useful here in isolating the impacts of economic conditions from the road safety specific impact.

1.4.2 Control sites were selected using three core criteria for comparison with Birmingham: Population Age; Ethnicity; and Indices of Multiple Deprivation (IMD) score. Further to this, the control sites had to be similar in nature geographically; being located in inner city areas with similar housing make-up and consequently similar highway infrastructure.

1.4.3 The two areas identified as control sites were Bradford and Coventry. These sites were similar in almost every way to Birmingham.

1.4.4 Coventry allows comparison against a similar site with very limited interventions; no major physical works implemented and the only ETP programmes were those forming part of city-wide initiatives (e.g. Kerbcraft training in primary schools).

1.4.5 Bradford delivered a programme of work that is in effect the opposite to Birmingham. The project led with extensive consultation and the development of ETP initiatives, whilst engineering schemes developed in more of a supporting role.

1.4.6 Inclusion of a site within the West Midlands helps to reduce the potential impact of regional variations in the assessment.

1.5 BROADER ASSESSMENT

1.5.1 Chapter 9 of this report, The Results, provides detailed analysis of how well the project met its aims and objectives based on data collected by BCC and other parties.

1.5.2 Chapter 10 of this report, Cost Effective Delivery of Casualty Reduction, presents the findings of the varying approaches to road safety issues as part of the range of DfT Road Safety Demonstration Projects. Whilst the initial findings from the Birmingham project presently offer only an indicative view of its impact (in light of the limited time period for after-monitoring data), some broad conclusions can be drawn with regards to the following issues:

- impact of the area-wide approach to road safety;
- comparative effectiveness of Education, Training and Publicity and engineering driven schemes; and
- cost effective delivery of route based road safety schemes.

1.6 STRUCTURE OF THIS REPORT

1.6.1 The remainder of this document is structured as follows:

- chapter 2 provides an overview of the area including social, demographic and economic profiles;
- chapter 3 provides an outline of the key deliverables for the project, i.e. the key engineering schemes and the main elements of the ETP activities;
- chapter 4 summarises BCC's original intent in terms of the development and delivery of the projects that acts as a backdrop to the later commentary and lessons learnt;
- chapter 5 discusses BCC's experience in delivering comprehensive engagement in the development of schemes and the decision making on preferred options;
- chapter 6 looks at the engineering scheme design process and the inter-linkages with other elements of the delivery process;
- chapter 7 looks at the implementation phase from procurement through to construction and at some of the barriers identified in that process;
- chapter 8 summarises the role of ETP in the project and identifies some of the benefits of integrating it with the remainder of the project more effectively;
- chapter 9 presents the results of the objective and subjective evaluation of the project from a variety of perspectives; and
- chapter 10 draws comparisons with other demonstration projects to determine whether the approach as a whole is effective.

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2 The Project Area

The project area was identified by BCC through assessment of casualty statistics and a variety of other indicators. A large (5 square miles), densely populated area with pockets of high deprivation. Housing infrastructure is typically dense, predominantly terraced housing. Transport infrastructure is an important determinant of the type of place, with significant severance from surrounding communities and with some heavily used routes within the area that also struggle to meet the commercial and social needs of the community at the same time. The combination of vibrant local community shopping centres, a large number of different ethnic groups and road safety issues presented an interesting challenge to the Council.

2.1 OVERVIEW OF PROJECT AREA

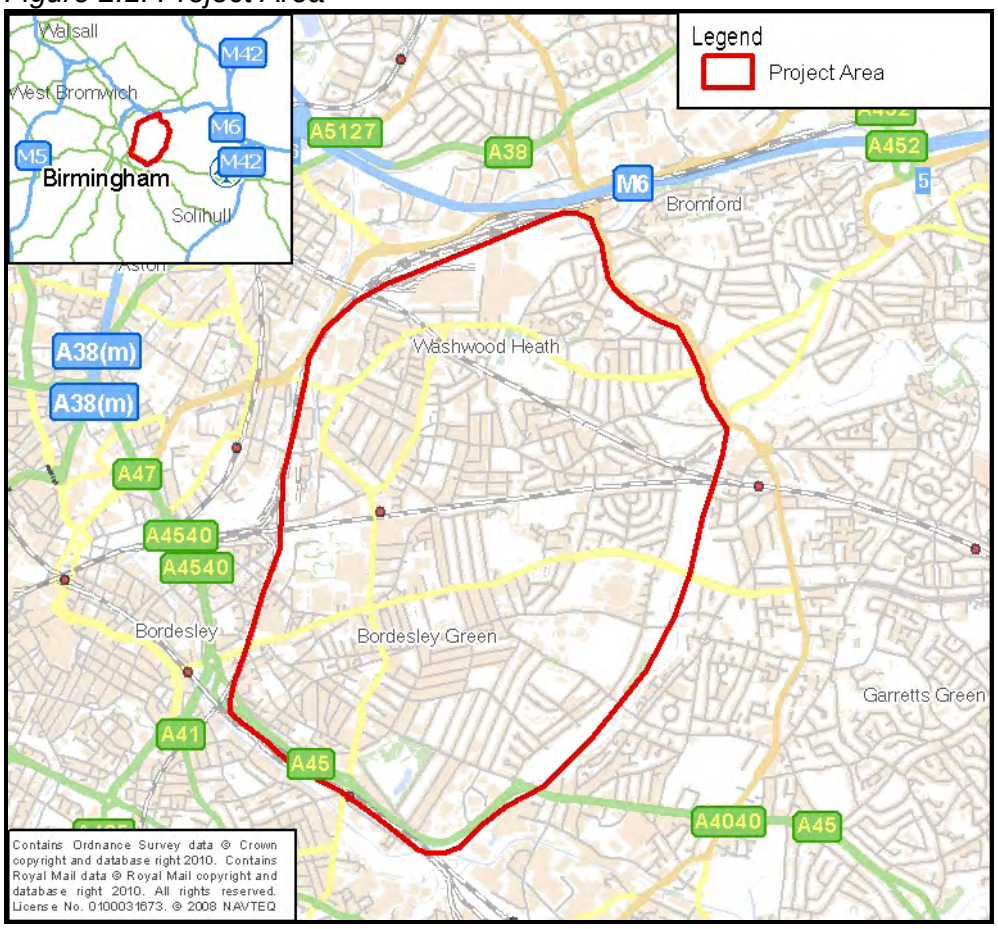
2.1.1 A detailed report by Transport Research Laboratory (TRL) was produced for BCC in late 2004 to provide baseline data for the scheme area. As this forms the most comprehensive range of background information, headline figures from this report are in this section where more up to date information is unavailable. A copy of the TRL Baseline Statistics Report can be found in Appendix A.

2.2 LOCATION

2.2.1 The scheme area lies to the east of the city centre and covers an area of approximately 5 square miles (see Figure 2.1). Within the area are several local shopping centres, schools, places of employment, leisure facilities and places of worship. The project area boundaries are set by the A47 to the north, by the A4040 and the River Cole to the east, and by the A45 to the south. These road routes, combined with a myriad of railway lines to the west of the project area act as further physical constraints to movement.

2.2.2 In addition to the key roads mentioned above, Bordesley Green Road and Alum Rock Road serve as important arterial routes through the project area. East-west links are not common in the area and so those routes in the area tend to be congested and also tend to carry key public transport services.

Figure 2.1: Project Area



2.3 ROAD SAFETY HISTORY

Use of detailed casualty analysis provided a robust basis on which to develop the casualty reduction strategy

2.3.1 Casualty data is shown in detail in Chapter 9 of this report, however the core issues can be summarised as follows:

- significantly higher rates of child pedestrian casualties (2.18 per 1000 child population vs. 0.3 and 0.2 for Birmingham City and England respectively);
- a high proportion, 64%, of pedestrian casualties with the cause attributed to ‘dangerous action in the carriageway’ (against a 7% national average);
- high numbers of accidents recorded along main roads through the area with only a handful of notable clusters;
- high numbers of hit and run accidents recorded;

- most pedestrians injured whilst crossing the road were not using a crossing and were masked by a vehicle; and

- excessive speed was recorded as a contributory factor in only 3% of incidents.

2.4 SOCIO-ECONOMIC CHARACTERISTICS

Demographics

2.4.1 The 2001 Census gives an excellent picture of the diverse make-up of the project area. It is characterised by a large child population (33% of the population was aged under 16) and a wide range of ethnic groups with Pakistani (49%) being the largest proportion of these.

2.4.2 As a consequence of the large child population, 50% of households within the project area had dependent children, compared to a 30% average in England and Wales. Of these households a quarter were recorded as single parent households.

2.4.3 Although the population is diverse it is very settled rather than transient. In 2001, 90% of the people within the project area lived at the same address as in 2000 and another 7.1% had lived within Birmingham previously; this is broadly similar to figures for England and Wales.

Employment

2.4.4 According to the National Statistics Socio-economic classification, in 2001, 21% of people aged 16 to 74 in the project area had never worked, which was in comparison to an average of 3% in England and Wales. Of those who did work, half were in semi-routine or routine operations, compared to a 30% average in England and Wales.

2.4.5 The area is adjacent to the industrial areas in and around Digbeth to the east of the city centre. Whilst this, combined with the central business district in Birmingham, represents significant employment opportunities, there are fewer major employers within the project area itself. This has recently been further exacerbated by the loss of the LDV (Leyland Daf Vans) factory in 2008, which with the loss of former ALSTOM train factory (Metro Cammell Carriage and Wagon Works) leaves a considerable area of Washwood Heath vacant for potential development.

2.4.6 Sizeable employers in the area include the NHS (Heartlands Hospital and Yardley Green Hospital form one of the largest facilities in the Birmingham East and North Primary Care Trust) and major supermarkets whilst the economy is significantly buoyed by the large and diverse number of independent businesses in the area.

Education

With high numbers of child casualties, understanding the movement of students in the area is important.

2.4.7 There are 22 primary schools in the area and six secondary schools. Where data is available, schools in the area show a high proportion (in the region of 70%) of pupils walking to school, mostly from within a ½ mile radius. It should be noted that there is only one school in the area offering education for 16-18 year olds and therefore it is likely that a large majority of children in this age group travel outside the area for education purposes.

2.4.8 In the project area, 52% of people age 16 to 74 had no educational qualifications, this compares to an average of 29% in England and Wales. Key Stage 2 (ages 7-11) educational performance is lower than average for three quarters of the primary schools in the area.

2.4.9 With the lack of further education providers in the area, significant numbers of pupils travel to colleges within the city centre area, including the Matthew Boulton Campus of Birmingham Metropolitan College to the west of the city centre and South Birmingham College with a campus in Digbeth east of the city centre.

Travel

Understanding how the community works and how the local economy operates is vital to identifying the key drivers for change and who the opinion formers might be.

2.4.10 In 2001 almost half of the households in the project area did not have access to a vehicle. This was in comparison to 26.8% in England and Wales. Only 8.5% of the project area had two cars, as opposed to 23.5% of England and Wales. However, it should be noted that the experience of the project team suggests that there are a higher number of residents with cars in the area than indicated by the census data. This may be due to a higher than national average number of unregistered vehicles in the area (also reflected in the number of hit and run accidents in the area, which is often an indication that a vehicle is not registered).

2.4.11 Whilst the area is bordered by train lines to the north and south with a line running east-west through the centre, train travel is limited by the limited accessibility to stations on these lines - one station is fairly central (Adderley Park) whilst the three other rail stations lie on the periphery of the project area. This increases the importance of buses in providing access to public transport in the area and a significant number of services travel through the area, predominantly using the main east-west arterial routes through the city centre, whilst a number of services are geared towards access to the hospitals.

Crime

2.4.12 In contrast with accident data, crime levels do not contrast significantly with city-wide or regional trends both in terms of overall recorded crime or specific categories. However, the statistics are presented in terms of offences per 1000 population and, given the high population density in the project area, would suggest that crime levels are correspondingly higher in geographical terms. Regardless of how the data is interpreted, both consultation and independent research undertaken in the area points towards high fear of crime and large parts of the project area deemed ‘unsafe’, particularly in hours of darkness, which acts as a deterrent to travel on foot and public transport.

Housing

2.4.13 Terraced housing makes up 51% of all accommodation with the remainder largely semi-detached and flats with a very small number of detached properties. Density varies throughout the area with an average of 60 residents per hectare and a total of 24,654 households. The project area has a lower proportion of owner occupied accommodation (54%) compared to the national average (69%) and the West Midlands average (71%). Additionally, 19.2% of households rent from the local authority, which is high in comparison to the West Midlands average of 11%.

Deprivation

2.4.14 Ranking by use of the 2004 Indices of Multiple Deprivation (IMD), prior to the development of the scheme, showed that the four wards that make-up the project area fall into the top 3% of most deprived wards in England. Within the West Midlands, they fall within the top 2%. Sparkbrook is the most deprived ward in Birmingham and the West Midlands and ranks 42nd in England.

2.4.15 Income and employment deprivation provide the highest weightings in the indices, followed by Health and Education that reflects much of the above information. Reviewing IMD figures for 2007 shows no significant change to the rankings for the project area.

3 Schemes and Initiatives Delivered

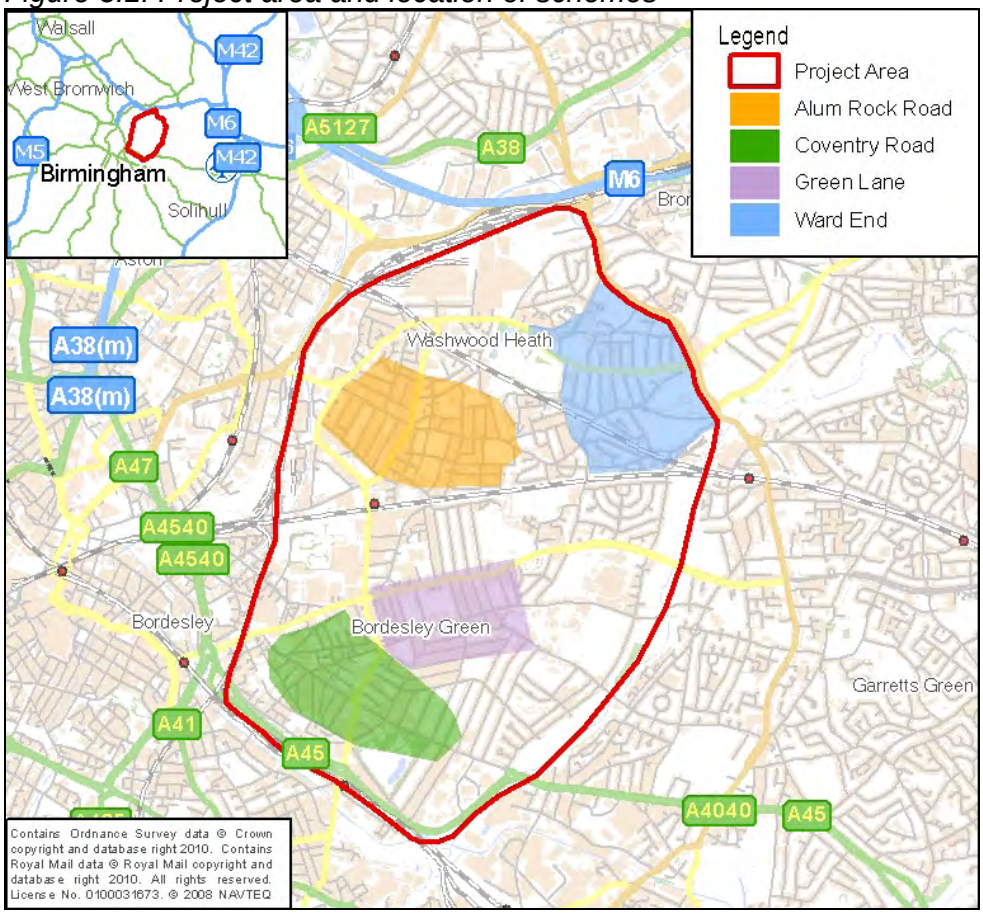
The overall project ultimately delivered by Birmingham City Council comprised the following:

- Two route treatments involving traffic engineering and parking management;
- Two local area treatment projects comprising work in residential areas as well as on local strategic road links;
- A small number of standalone schemes for individual junctions; and
- Education training and publicity initiatives targeting a number of key user groups where specific road safety problems had been identified.

This section provides a brief overview of what was ultimately delivered to provide a backdrop to the later discussions on how the project evolved in response to the challenges faced.

3.1.1 The four key project areas are shown in Figure 3.1 below within the project area boundary.

Figure 3.1: Project area and location of schemes



3.2 ALUM ROCK ROAD

Overview

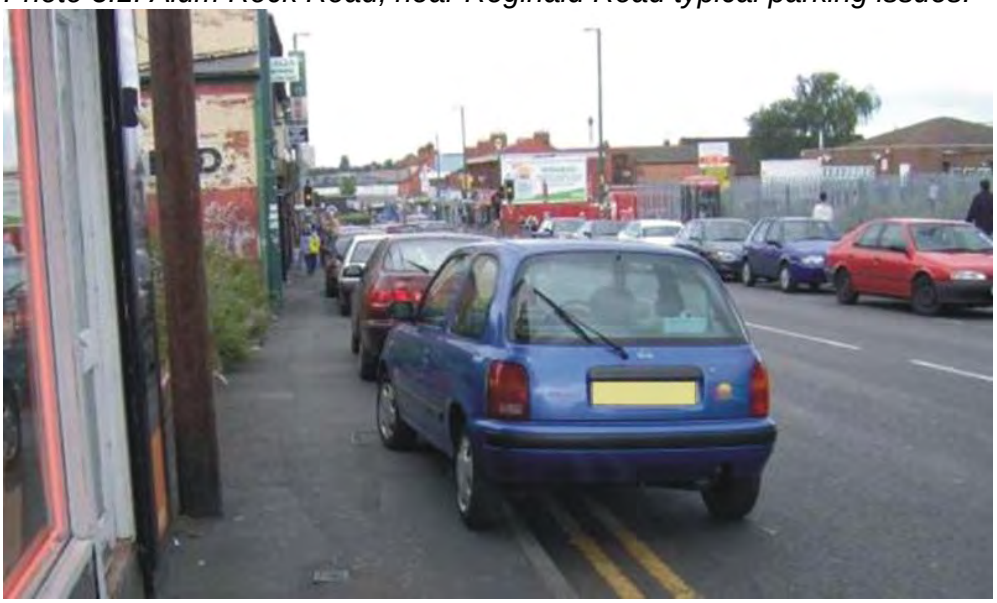
3.2.1 Alum Rock Road is one of the few east-west corridors in the northern part of the project area and the core aspect of work in this area was the route based treatment concentrated at its western end but with further improvements extending throughout its length within the project area. At the west end it is a busy shopping street comprised largely of independent traders. Hours of business vary, however many traders (particularly food retailers) are open from mid-morning until late at night, therefore activity along the street does not reflect the traditional high street. The eastern end of the route is more residential with pockets of shops forming small local centres near key junctions.

The Mixed Priority Routes project also addressed routes of a similar nature across the 10 authorities involved in the project. The Inner City Safety Demonstration Project adds to our experience of working in areas where issues of viability of businesses is a significant consideration. In these circumstances a high level of engagement with local businesses is vital.

Road safety and other issues

3.2.2 Within Alum Rock there is a history of concerns about safety, congestion and parking that the scheme attempts to address. High levels of congestion are experienced throughout trading hours on Alum Rock Road, which affects vehicle journey times through the area. This was primarily as a result of illegal parking and loading. Problems were so severe that some bus routes had previously been diverted away from the area.

Photo 3.1: Alum Rock Road, near Reginald Road typical parking issues:



3.2.3 The route and many of the nearby roads are characterised by wide, straight carriageways with comparatively narrow footways. Residential streets are largely made up of Victorian terraced housing with no off-road parking. Shops on the route are almost exclusively run by independent traders offering a vast range of goods and services. Some of the adjoining residential streets had traffic calming in place dating back over 15 years, comprising full width speed bumps with a very high profile but also very effective at reducing speeds on these streets.

Scheme aims and key features

3.2.4 The scheme comprised two main areas of work; treatment of the main road and supplementary works on surrounding residential streets. This involved a range of traffic calming features (speed cushions, raised tables and junction entry treatments), wider footways and junction improvements at key locations to resolve congestion, safety and accessibility issues.

3.2.5 Improvements included pedestrian crossings, traffic calming where necessary, lighting for safety, improved footways (including surfacing and removal of obstructions) and provision of a new off-street car park.

3.2.6 Key measures delivered included:

- changes to parking and loading arrangements and improved pedestrian environment (west end of Alum Rock Road);

- timed restrictions allow parking and loading according to the prevailing flow of traffic (i.e. no parking /loading for eastbound traffic, away from the city centre, during the PM peak) to reduce congestion;

- restricting parking /loading to one side of the street during busy periods improves visibility for all users – the aim being to reduce accidents involving pedestrians crossing between parked vehicles; and

- creating clearly defined parking /loading bays with footway extensions and new markings has allowed the widening of footways and narrowing the traffic lanes on the carriageway to reduce both vehicle speeds and crossing distances for pedestrians – key contributors to accidents on the route.

Photo 3.2: New pedestrian crossing at west end of Alum Rock Road

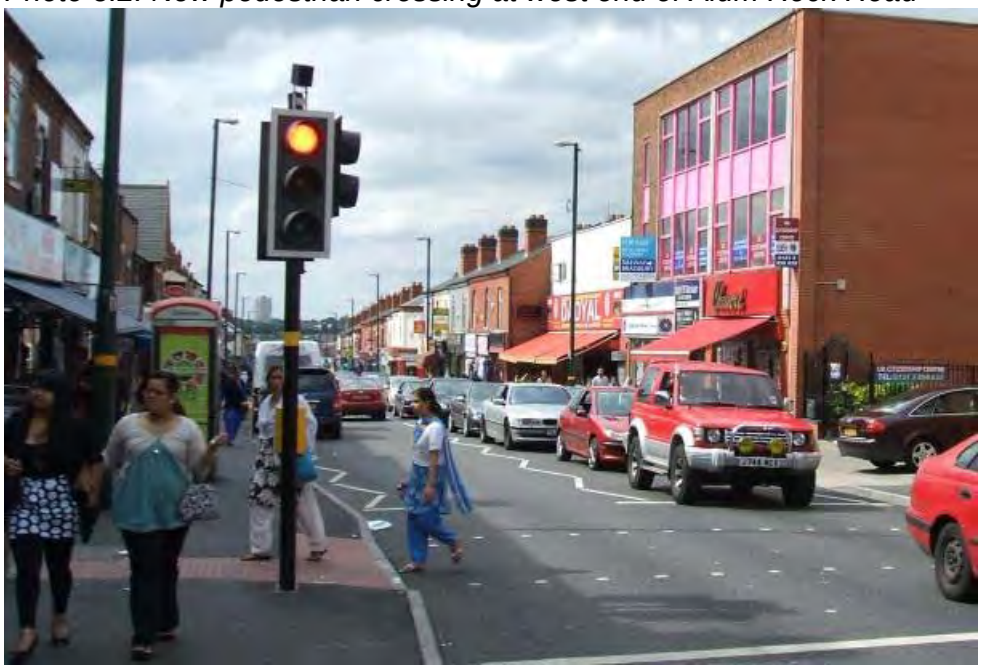


Photo 3.3: Bus stop footway extensions facilitate informal crossing whilst discouraging parking and loading

Junction improvements at Bowyer Road /Highfield Road

- Aimed at addressing accident problems through poor lane discipline and conflict between turning movements by realigning the carriageway and re-design of signals. Further benefits are gained from improving traffic flows.

- Introduces pedestrian facilities where accidents were common as pedestrians were brought into conflict with the various vehicle movements.

Introduction of pedestrian facilities at Naseby Road /Anthony Road

- Provides pedestrian crossing facilities where there were previously none in response to a high number of pedestrian casualties and the school located on Anthony Road.

Traffic calming in residential areas to north of Alum Rock Road

- Aimed at reducing vehicle speeds where pedestrian casualties are high, attributable to speeds and poor pedestrian visibility due to parked vehicles on both sides on the road throughout the area.

Photo 3.4: Examples of residential traffic calming

Photo 3.5: 20mph zones and vertical traffic calming

3.3 COVENTRY ROAD

Overview

3.3.1 The Coventry Road lies in the south of the project area and is largely a route treatment scheme encompassing some significant junction improvement and other works affecting adjacent and intersecting routes. The Coventry Road scheme encompasses Coventry Road between Cattell Road and Dora Road and extends between Camelot Way to the south and Hugh Road to the north.

3.3.2 Formerly a key strategic link into Birmingham City Centre, the section within the study area is now bypassed with Small Heath Highway providing the strategic link to the city's ring road and city centre. However, the route still carries high volumes of traffic and remains a busy shopping street with a variety of retail activity and other services.

3.3.3 Coventry Road local centre plays an important role in the community and has been included in the Local Centres Regeneration Programme for Birmingham.

Photo 3.6: Coventry Road – high demand for parking

Road safety and other issues

3.3.4 There have been a high number of accidents along this section of the Coventry Road and the immediate surrounding areas and, similar to Alum Rock, the local centre has a history of concerns about safety, congestion and parking.

3.3.5 The local centre experiences high levels of congestion throughout the day due primarily to high traffic volumes but with speeding being reported as a problem in the evenings. Coventry Road, unlike Alum Rock Road, is relatively wide with spacious footways; however pedestrians find it difficult to cross the carriageway, particularly at the junctions. Most of the frontage along the Coventry Road is private. Problems have been encountered as a result of parking spilling onto the footway and vehicles accessing frontages illegally, either by access through pedestrian crossing points, or by driving along footways.

Scheme aims and key features

3.3.6 All of the options considered included specific junction treatments to improve pedestrian facilities. The other options considered include measures to reduce the traffic speeds between junctions, measures to discourage “through” traffic from Coventry Road on to the Small Heath Highway and measures to assist pedestrians to cross the road between junctions.

3.3.7 The scheme principally involved junction upgrades, pedestrian facilities and enhancements to the pedestrian environment and various other minor measures. Elements of traffic calming have also been included on surrounding roads.

3.3.8 Aims and objectives for the measures developed for Coventry Road are summarised as follows:

- enhanced pedestrian environment (throughout whole route) - widened footways, constraining vehicular access to forecourt areas, increasing the footway area and provision of new pedestrian crossings;

- junction improvements to signalised junction at Muntz Street /Golden Hillock Road to both improve pedestrian accessibility and traffic flow through the junction; and

- improved lighting for safety and improved footways, (including surfacing and removal /prevention of obstructions).

Photo 3.7: New pedestrian crossing facility (note old kerb line to the right of the bollards)

Photo 3.8: New pedestrian refuge and footway extensions

Photo 3.9: Muntz Street /Golden Hillock Road junction – now with a full pedestrian phase on all arms

3.4 GREEN LANE

Overview

3.4.1 The Green Lane scheme encompasses the area between Victoria Street to the west and Drummond Road to the east. The area extends to Bankes Road to the south and Bordesley Green to the north. Green Lane Mosque is located to the west near Coventry Road and is a major feature for the community attracting worshippers from throughout the project area. Green Lane itself has shops and other amenities along its length, but these are not in any significant density and are mostly interspersed with residential properties.

Road safety and other issues

3.4.2 Accident figures show a high number of accidents in this area with almost half of all pedestrian casualties involving children under 16. Concerns have been raised historically with regard to safety, congestion and parking.

3.4.3 With a large number of residential streets linking Green Lane with Bordesley Green (running parallel to the north), many accidents were attributed to conflict at the many junctions along the route as well as on the adjoining residential streets used for rat-running. Furthermore, there are a number of shops, a school and other amenities on the route generating pedestrian demand but with few opportunities for crossing.

SCHEME AIMS AND KEY FEATURES

3.4.4 The scheme comprises proposed parking and loading changes, junction upgrades and improved pedestrian facilities along Green Lane itself, and also involves extensive traffic calming on the residential streets that run between Bordesley Green and Green Lane.

Photo 3.10: Green Lane /Third Avenue – carriageway narrowing and footway extensions at zebra crossing

3.4.5 Aims and objectives for the measures developed for Green Lane are summarised as follows:

- Junction improvements (Green Lane and Bordesley Green) to address some serious accident clusters, includes introduction of parking restrictions to improve visibility; and

- introduction of one-way streets (between Green Lane and Bordesley Green) to reduce conflict at side street junctions.

Photo 3.11: Parking management issues[2]

Photo 3.12: Residential traffic calming[2]

[2] It is noted that even after schemes were complete illegal parking activity continued.

3.5 WARD END

Overview

3.5.1 There are some similarities with the Green Lane area in terms of the presence of a large primary school in the area as well as high levels of rat-running on residential streets accommodating north-south movements through an area where the majority of arterial routes run east-west from the city centre.

Road safety and other issues

3.5.2 Ward End differs from the other scheme areas as problems relate to a mostly residential area. The main issue relates to streets both to the north and south of Washwood Heath Road with high accident levels throughout the area but higher on those commonly used as through routes. Over 50% of the pedestrian casualties are children and three fatalities have been recorded in a three year period.

Scheme aims and key features

3.5.3 Aims and objectives are broader than for the other schemes where accidents are more clearly associated with particular key routes and junctions. In Ward End there are high levels of child pedestrian casualties spread throughout the area in both residential streets and on distributor roads.

3.5.4 Improvements range from speed reduction measures on link roads, improved facilities for pedestrians, and an assessment of access arrangements on residential streets (often used as through routes by commuter traffic). Local centres have been improved to ensure shops are more directly accessible to pedestrians and to control parking around the shops to improve safety.

3.5.5 The key aims of the work throughout the area can be summarised as follows:

- reduce child pedestrian casualties through traffic calming on residential streets and targeted crossing and junction improvements;
- provide area-wide accessibility improvements to ensure that local centres, community facilities and public transport can be reached easily by walking and cycling; and

- to develop a network of safe routes that provide for the main accessibility needs of people living and working in the area.

Photo 3.13: 20 mph Zones introduced throughout large parts of the area

Photo 3.14: Speed cushions for traffic calming

3.6 JUNCTION IMPROVEMENTS AND OTHER SCHEMES

3.6.1 A number of additional improvement schemes were identified throughout the study area. Some were in support of route treatment schemes (providing wider strategic improvements at key junctions on the routes outside the core engineering works) and other to specifically address identified clusters of accidents. Early programme drafts identify ten different schemes for development.

3.6.2 Major improvement works have been implemented at the following junctions:

- *Bordesley Green /Belchers Lane* – Proximity to Heartlands Hospital ensures high volumes of vehicle and pedestrian traffic. Junction improvements are aimed at reducing the number of accidents, mostly involving vehicles, due to poor lane discipline on the approach and circulatory carriageway of the roundabout.

Photo 3.15: Bordesley Green /Belchers Lane

- *Bordesley Green /Eastfield Road /Little Bromwich Road* – There were high numbers of incidents recorded involving vehicles exiting Bordesley Green onto Little Bromwich Road and Eastfield Road. The junction was redesigned to provide marked right turn lanes and modifications to road markings on the approach to the junction to improve lane discipline whilst also including an additional signal phase prioritising eastbound traffic on Bordesley Green and restricting turning movements.

- *Cotterills Lane Alum Rock Road* - The wide carriageway on Alum Rock Road leads to high vehicle speeds whilst the straight through alignment of the lane exiting Cotterills Lane also encouraged high speeds through the junction. The junction has been realigned to significantly reduce the entry width and improve visibility in order to reduce speeds and the consequent high number of incidents at this location.

Photo 3.16: Cotterills Lane/Alum Rock Road realignment (old kerb line runs adjacent to tree)

- *Caldwell Road /Belchers Lane* - Caldwell Road is a key residential distributor adjoining Belchers Lane where the road alignment and forward visibility result in high vehicle speeds. To address pedestrian casualties concentrated in this area, the zebra crossing to the south of the junction has been upgraded to a signalised crossing.

3.7 EDUCATION, TRAINING AND PUBLICITY – SAFER ACCESSIBILITY FOR YOUNG PEOPLE

Overview

3.7.1 Workshop days were delivered in schools throughout the area to understand children's perceptions of their area and the issues as being addressed by the project. Feedback was collated from all areas and fed back to the project team. In essence this was a dual ETP and consultation exercise developed to tackle behavioural concerns over high child casualty rates.

3.7.2 The team for delivering this element of work comprised Council road safety officers and the Safer Routes to School team, together with input from the University of West Of England.

Road safety and other issues

3.7.3 Over half of the pedestrian casualties in the project area were children, and this group has the highest severity levels. This is reflected in both vulnerable road users with 166 child pedestrian casualties and 18 child cyclist casualties (and levels of under reporting of child cyclist casualties are normally high). Additionally 155 children were also injured whilst passengers in cars.

Scheme aims and key features

3.7.4 It was understood that attitudes formed by children to road safety, accessibility and sustainable travel will influence future behaviour, whilst also potentially having an impact upon parents by children passing on knowledge.

3.7.5 A number of concerns about road safety and accessibility were raised from the young people discussion groups and helped to inform the aims and objectives:

- undertake a detailed assessment of the road safety and accessibility needs and concerns of young people, as input to the other projects in the overall programme;
- deliver a package of initiatives developed by local people to encourage safety on the roads; and
- contribute to good practice guidance for road safety provision for young people elsewhere in Birmingham and the country.

3.7.6 West Midlands Police followed this and other ETP campaigns with sustained and visible enforcement of traffic regulations within the study area, particularly speeding. This was in response to findings into the impact of road safety based ETP initiatives - their impact tending to be short-term due to the lack of any tangible reinforcement of the key messages over longer periods.

4 The Approach

This chapter summarises how Birmingham City Council originally intended to deliver the project in terms of consultation, scheme development and delivery. It is important to understand the early intentions of the project, and how challenging the intended approach was, to fully understand and appreciate the lessons learnt.

4.1 THE PROPOSAL

4.1.1 The project began with a request for submissions to DfT for funding in 2003. The interested authorities used existing data, consultation responses and rapidly developed scheme proposals to make their submissions.

4.1.2 All of the authorities shortlisted had the opportunity to present their plans to DfT during site visits and it was during these presentations that BCC's challenging approach was clearly stated:

- they proposed bottom-up approach for the identification and development of solutions that was firmly rooted in the engagement with the local community at all stages in the process;
- they demonstrated their excellent local links into the community through the support from local community leaders during the site visit; and
- they intended to treat some extremely challenging and sensitive street environments that included almost all of the challenges a local authority was ever likely to face in delivering an inner city safety scheme.

The approach put forward by Birmingham City Council was the most radical of the Inner City Safety Demonstration Project submissions and was more challenging than any followed by the Mixed Priority Routes schemes. A genuine bottom-up community led approach.

4.2 THE APPROACH

4.2.1 BCC's approach to the development and delivery of the schemes was simple and yet challenging:

- identify scheme areas using objective datasets such as STATS19[3] (Police accident recording form) records supplemented by a range of other data;

- develop the schemes through deep and comprehensive engagement with local groups, from the very start of the project all the way through to completion and construction; and

- development of education, training and publicity approaches to complement the engineering works.

The data-led approach to assessing casualty reduction strategies is one that had been successfully trialled on the Mixed Priority Routes project. In particular Oxford used the approach successfully to help understand how the route functioned for use in public consultations and design workshops.

4.3 IDENTIFICATION OF SCHEME AREAS

4.3.1 In the development of the overall project proposals BCC made use of existing data and its own understanding of the environment to identify the project area. There were a number of common issues throughout the project area that provided the rationale for the project, summarised below. It was recognised by the Council that these were only preliminary conclusions that would need to be tested through discussion with the local community and its representative groups:

- **Casualty statistics** – Areas were identified where there were sufficient casualties that reasonable reductions in casualty rates (approximately one third) would justify the investment of approximately £6m. On a city wide basis, nearly 11% of all accidents occurred in the project area from 2004-2006 whilst housing only 7.7% of the population.

- **High levels of child pedestrian casualties** – This identified a need for specific focus on some of the busier residential roads in the areas in addition to the obviously problematic main routes. The location of a number of schools within the area provided further justification for addressing accessibility issues that might not have otherwise been considered through standard appraisal processes. The existence of high levels of child casualties also indicated a possible requirement for an education, training and publicity programme.

[3] STATS19 is the standard data collection form used by police to summarise key features of and road traffic accident. The data from this collection forms the basis of GB casualty and accident statistics.

The Neighbourhood Road Safety Initiative project was specifically targeted at the delivery of improvements in child casualty rates in areas that were predominantly highly urbanised. However, the level of engineering intervention was very low. Inner City Safety Demonstration Project provides an alternative approach within an urban area using a balance of engineering and education, training and publicity investment.

Parking is always a significant issue on our busier streets. Expect to have significant vested interests from commercial and residential frontages and plan to deal with the issues up front.

BCC recognised the issue but the degree to which it became a design constraint for the whole project was a surprise.

- **Parking and loading** – This was known to be a major barrier to pedestrian accessibility as well as the main cause of congestion on shopping streets throughout the area. The majority of legal parking and loading was accommodated on the carriageway with no physical segregation of these facilities from traffic. In many cases visibility for pedestrians was significantly reduced, potentially resulting in increased casualty rates. Despite regular enforcement (Alum Rock Road was the third most ticketed street in the UK in 2006), illegal parking and loading has been a continuous problem that was considered a serious threat to the success of the project.

- **Junctions: Congestion, safety and accessibility** – A considerable number of junctions throughout the area were identified as having particular congestion, safety or accessibility issues. Several major signalised junctions did not have provision for pedestrians on all arms whilst it was clear from surveys and consultation with key stakeholders where serious delays were occurring in the area. Accident problems at give-way junctions on main roads were also an issue.

- **Quality of the street environment** – In some areas, the quality of the street environment was extremely poor. As a result this element was a major influencing factor on design as it was considered of equal importance to road safety for local ward members and Council officers alike.

The quality of the urban realm was a significant part of the investment strategies for most Mixed Priority Route projects but also an area of concern from local authorities trying to emulate the approach. Inner City Safety Demonstration Project provides the opportunity to test whether the quality of the materials used is a significant consideration for local people and businesses.

4.3.2 The mainly data-led approach of in-depth analysis used GIS (Geographical Information Systems) to identify geographical areas where problems were concentrated. From this output the ‘core’ schemes were developed and included the following areas:

- Alum Rock Road, a high street and local centre of high strategic importance along the busiest arterial route;
- Coventry Road, an important local centre based around the high street;
- Green Lane, a minor arterial route and residential area between Coventry Road and Bordesley Green (road); and
- Ward End, a predominantly residential area with small local centres based around the east end of Alum Rock Road and along Washwood Heath Road.

The aspiration to deliver inner city schemes through a community-led design approach was well considered. However, this was to prove one of the most significant challenges on the project. See Chapter 5.

4.3.3 These areas, in conjunction with smaller junction improvements at specific locations throughout the area, offered the greatest potential for a high rate of return in terms of accident reduction through engineering interventions.

4.4 ENGAGEMENT OF THE LOCAL COMMUNITY

4.4.1 The Council planned to adopt an approach to consultation and engagement that differed significantly from the conventional approach adopted for engineering schemes. The intention was to develop schemes through regular and on-going engagement of the community, from problem identification all the way through to finalising and delivering schemes. This was intended to be delivered through two avenues.

4.4.2 The first was the development of stakeholder community groups that had on them representation from the key individual community groups. These groups would meet on a regular basis and be involved in the development of schemes, act as a sounding board for any proposals and be champions of the schemes with the community as a whole. The second approach was through a ground-up, broadly based engagement process based on regular communication with individuals through a bespoke community newsletter and regular events timed to coincide with key gateways and decision points in the design process.

4.4.3 Separate to the engagement with community groups there was recognition of the need to manage and engage the local councillors in the area and this was to be undertaken through BCC's conventional approach of formally writing to councillors and asking for the comments.

The approach required the Council to develop and maintain a high level of involvement from stakeholders and the community at large over a long period. This provided to be a real challenge (see Chapter 5).

Strategy

4.4.4 A consultation strategy was produced outlining the approach and programme for delivery. Three activities were planned:

- **Steering groups –** steering groups were to be set up that were representative of all of the users in the area. These groups would act as a sounding board throughout the project to assess acceptability and to develop and agree appropriate accommodations to ensure deliverability.

- **Phase 1: Engagement** - an information gathering exercise consisting of a letter drop with a basic questionnaire, information leaflet and A3 plan for consultees to mark up. Steering groups and design workshops were to be set up to further focus public and stakeholder involvement.

- **Phase 2: Optioneering** - a focused consultation seeking support from consultees on a number of designed options. These options were to be developed following information gathered from Phase 1 and the direction given by Steering Groups and Design Workshops. A separate consultation plan was to be developed for this.

4.4.5 Whilst these three elements were set out as separate activities, there was a general assumption that engagement would be deep and on-going throughout the whole of the project programme. It was implicitly included in the scheme development process described briefly below.

Both Mixed Priority Routes and Neighbourhood Road Safety Initiative developed intervention plans on the basis of detailed analysis of casualty records combined with a solid understanding of the way in that the local area 'ticked'.

Photo 4.1: Consultation displays on board the mobile display truck

4.5 SCHEME DEVELOPMENT

Option development

4.5.1 The development of engineering options was informed by both "hard" data such as STATS19 accident data and results of the phase one consultation.

4.5.2 The results of phase one (responses on key issues, expectation and aspirations) were to be mapped and analysed spatially, i.e. which issues were raised in which locations. This would allow road safety solutions to be developed that also addressed other concerns and expectations of local residents and others. Spatial analysis would also allow consultation results to be analysed in the context of the statistical data available for the area, allowing context-sensitive solutions to be developed easily and the rationale behind the design decisions to be illustrated graphically.

Preferred option selection

4.5.3 Following development of scheme options, the selection process of the preferred solution would be through consultation phase two. Residents and other stakeholders were to be given an opportunity to comment on preferred options or request further improvements. The approach was to allow discussions with the design engineers and voting on design options through a series of local public exhibitions in order to identify the preferred scheme options.

4.5.4 It was envisaged that the development and selection of schemes based on a comprehensive engagement with stakeholders and regular discussion with the steering groups would simplify the political approvals process required to allow officers to move on to the detailed design process.

4.6 DETAILED DESIGN AND DELIVERY

4.6.1 There was recognition from the very earliest stages of the process that delivering multi-million pound works in an inner city area covering a number of locations was going to be on an extended timeline for both design and delivery. As a result the programme for delivery was intended to be:

- delivery of small scale “quick wins” to demonstrate intent and provide local benefits in advance of the disruptive major works; and

- major works to be delivered in the last 2 years of the programme, staggered to reduce cumulative impacts of road closures /capacity reduction /public transport re-routing.

4.6.2 This was a prudent and well-considered approach, recognising some of the barriers to delivery.

Procurement

4.6.3 BCC's standing orders clearly identified the preferred approach to delivering major schemes – the development of detailed designs, contract drawings and Bills of Quantity. Competitive quotes would then be submitted for the works with final decisions being made by the relevant member of the Cabinet. It was the intention to use this approach for the procurement of the major works; in all likelihood let to a number of contractors and to be constructed in a staggered fashion to reduce the impact on the community of major roadworks running concurrently.

4.6.4 The Council also had the option of using its select list contractors for minor works where this was appropriate.

4.6.5 This considered approach offered the opportunity for flexible procurement but reduced risk of cost escalation as the schemes had been developed to a construction stage by the Council's in-house design team.

The procurement strategy identified was similar to those used by most local authorities. However, the approach needed extensive lead-in times that proved difficult to achieve and a new, successful approach was ultimately used (see Chapter 7).

4.7 EDUCATION, TRAINING AND PUBLICITY

4.7.1 Although ETP was identified early on in the project as an important element of work, it was generally viewed as playing a supporting role to the engineering schemes and was envisaged to be delivered alongside those schemes on the ground.

4.7.2 The approach was to develop ETP using:

- STATS19 data to identify key risk areas;
- outputs from the Phase 1 consultation to identify areas of concern from local stakeholders; and
- experience from DfT's Neighbourhood Road Safety Initiative where similar areas /problems had been treated in other towns and cities.

A similar approach was successfully used on the Mixed Priority Routes demonstration project in Hull to allow construction to begin on specific scheme elements. Separate contracts were let for work packages at each end of the route whilst consultation and development continued on the more challenging aspects elsewhere.

4.7.3 The intention was to deliver ETP training in a manner that reinforced and supported the engineering works being delivered. They would therefore be delivered in a similar timescale, i.e. mainly delivered towards the end of the project programme.

4.7.4 The exception to this was the Young People's Safer Accessibility project (see 3.7), which was developed early on as a springboard to inform later work and address child casualties, a particular area of concern to the Council.

4.7.5 Beyond this initial project, there were no specific plans or projects identified for delivery.

5 Engaging the Community

Birmingham City Council's experience delivering their planned engagement approach presents a range of learning and improvement opportunities, many of which the Council has already adopted. The most significant barrier to successful delivery was not recognising the complexities of the local community and the need for specialist skills to deliver that engagement successfully. The impact on the project of limited community engagement in the discussions required to identify the right, acceptable approach was far-reaching. It emphasises the importance of getting this element right from the very start on consultation-based scheme development projects.

As discussed in Chapter 4, the role of consultation as a communication and decision-making tool was vital to the success of the project. This chapter provides a detailed discussion on how this element of the project developed over time, what lessons were learnt and what other authorities considering a similar approach should consider in the future.

5.1 SKILLS AND RESOURCES

LESSON LEARNT – consultation and engagement exercises are technically demanding. Where the community or issues are complex a specialist within the organisation or externally should be engaged at a minimum to design and monitor the process.

5.1.1 At the outset of the project, the consultation was seen as something which, whilst being resource intensive, was deliverable with existing skills and resources in the highways team. This was primarily a result of a desire to ensure that the engineers involved in the design of the schemes were completely immersed in the scheme and were familiar with the expectations of the local community.

5.1.2 Historically BCC had delivered consultation in two ways:

- For smaller schemes consultation was undertaken by members of the engineering team. This consultation was generally the standard, state-of-practice approaches designed primarily to identify objections to projects.

- For larger schemes, especially those involved regeneration /urban realm the consultation was either undertaken by other technical departments in the Council (for example planning) or through external experts.

5.1.3 The experience in delivering the consultation exercise (more details are provided in the rest of this section) indicates that the council had not fully appreciated the increasing complexity of issues on such projects and had not responded quickly enough in terms of skills and resources. The difficulties experienced were varied but key elements were:

- staff were not experienced in how to develop consultation approaches that engaged the interest of some of the groups;
- staff were not experienced at consensus building where there were conflicting interests; and
- the team did not have the mix of backgrounds required to enable all community groups to be engaged effectively – for example, some groups were unwilling /unable to talk to male members of staff.

5.1.4 The Council did recognise that the approach being adopted was beyond their expertise but by that time it was too late in the process to be able to effectively start afresh.

Experience from the Neighbourhood Road Safety Initiative is that working with partners who have the links into the community and the skills to discuss and negotiate with local people is vital. Birmingham City Council found out later in the process that getting the right cultural fit between consulter and consultee will produce results.

5.2 THE ORIGINAL CONSULTATION STRATEGY

Communication and consultation plan

5.2.1 The plan for the consultation involved:

- **Phase 1** - the formation of steering groups and hosting design workshops, along with internal meetings with Birmingham City Council specialists such as the sustainable transport team and district engineers. This was followed by a letter, leaflet and questionnaire drop to local residents and businesses for all of the major scheme areas.
- **Phase 2** - to review options and identify preferred solutions. This was intended to be by postal vote.

- **Phase 3 –** construction communication adopting the Council's tried and tested approaches to dissemination of information in advance of works commencing.
- **On-going political interface** – regular communication with the key individuals are a ward and city level.
- **On-going communication** – via a variety of hard and soft copy approaches.

LESSON LEARNT – delivering consultation in large, densely populated communities is a resource-intensive approach. Teams need to plan for the maintenance of effort throughout the whole project.

Communication channels

5.2.2 The plan for consultation was for continuous and in-depth consultation on a range of issues to deliver schemes that were sensitive to the local context /community aspirations and which were widely accepted.

5.2.3 Various activities and techniques were envisaged at the start of the consultation to engage with both local residents and stakeholders as outlined below:

- two Steering Groups (invitees included MP, Ward Councillors, local group leaders /representatives and emergency services representatives);
- two Design Panels (invitees included local residents via local community groups);
- letter drop and questionnaire to all local residents; and
- public exhibitions.

Photo 5.2: Public exhibition vehicle and staff

5.2.4 Communication activities planned to complement this include:

Activity	Notes
Creation of Streets Ahead on Safety logo and approval gained from Cabinet Member	The intent was to clearly brand all documentation and communication with a strong message. Indications are that this branding exercise was not as effective as hoped.
Four-page supplement in Forward, Birmingham City Council's free tabloid newspaper distributed to 375,0000 homes and placed on website	The project started with a big "splash" in the local free newspaper to raise awareness of the project. Again, indications are that this approach did not engage people.
Provide editorial, graphics and design contributions to leaflets, newsletters, posters and other publications as appropriate and timely	As required to support key dates: **Summer 2006 -** Feedback on first round of consultation **Autumn 2006** - Public consultation to identify options **Autumn-Winter 2006** – Alum Rock Road Phase 1 starts **Winter 2006 -** Feedback on second round of consultation **Spring 2007 -** Public consultation on detailed designs **Summer 2007 -** Feedback on third

Activity	Notes
	round of consultation **Autumn 2007 -** Main work begins in phased programme
Web pages created for Streets Ahead on Safety pages at www.birmingham.gov.uk/streetsahead	Providing a central repository for publically available information.
Provide editorial input into news releases; arrange photocalls as appropriate	As required to support key dates identified.

Identifying and understanding stakeholders

5.2.5 Stakeholders were identified from an early stage in the project and were drawn from various groups or organisations with whom it was felt it was important and necessary to consult and engage. Stakeholders included:

- Political groups
- Emergency services
- Bus operators
- Council officers
- Disability groups
- Statutory undertakers
- Traders associations
- Residents
- Educational establishments
- Health service (hospitals and doctors)

5.2.6 Other community groups were obtained through discussions with BCC's consultation and communication team and through liaison with local community officers. The consultation strategy was being delivered at the same time as new local area management structures and mechanisms were being put in place.

5.2.7 Over such an extensive area there was a necessity to communicate effectively with the local councillors as gateways to the local community and with the Cabinet Member as key decision maker and approver of major project spend.

5.3 ENGAGEMENT AND CONSULTATION: AS IT HAPPENED

Challenges and issues

5.3.1 A consultation strategy was developed early on identifying the programme and full range of activities to be undertaken. However, there were some shortcomings that had significant impacts of the effectiveness of the engagement process with subsequent knock-on effects on the design and delivery process. Issues included:

- lack of an experienced project team used to delivering engagement of this nature;
- lack of institutional links into the community meaning that information used to inform the engagement process did not provide a sound basis for decision making;
- poorly developed local community groups limiting engagement opportunities;
- a mismatch between local perceptions of the key problems and the road safety branding of the project; and
- lack of experience in delivering the necessary consensus across different groups.

5.3.2 These created a series of challenges for the project that could not be addressed considering the other budgetary, financial, political and resource constraints within which BCC was working.

5.3.3 The impact is discussed below, along with insightful comment from the project team and others on some of the challenges faced.

Phase 1

5.3.4 This first phase of consultation involved the formation of steering groups and hosting design workshops, along with internal meetings with Birmingham City Council specialists such as the sustainable transport team and district engineers. This was followed by a letter, leaflet and questionnaire drop to local residents and businesses for all of the major scheme areas.

Steering Groups /Design Panels

5.3.5 The original plan was to establish one or more steering groups that represented the interests of all in the community for the duration of the project. However, despite invitations being sent out to a broad spectrum of people difficulties were experienced in trying to establish the groups. This presented a significant set-back to the project as it lacked a clear and empowered forum for communicating to the whole of the community.

5.3.6 In addition to the issues discussed at the start of this section other factors contributing to the lack of engagement were that:

- the process of inviting people to sit on the committee was low key and not in keeping with the importance and influence of the groups; and
- an over-optimistic assessment of how many invitations would need to be sent out to get a reliable and robust attendance at the meetings – 50 people were invited to sit on each group.

Birmingham was starting from a low base in terms of local engagement and quality relationships with the community. The approach set out by BCC may have been a step too far based on existing relationships.

"The people who were on the list were the right people, but perhaps it was a bit too ambitious to think we were going to get 50% or even – I think we probably only ever did less than 10% on there. In theory it was all the right people at the right time but the time and effort and resources required to actually get them to attend was more than we had."

We couldn't get the involvement or engagement. You'd have one steering group and you'd have four people turn up. You simply can't empower four people to make decisions like that."

Events

5.3.7 A range of public events were held including:

- Unstaffed exhibitions which were attended by 55 people; and
- a post-back questionnaire sent to all 13,000 households and businesses in the community.

5.3.8 The unstaffed exhibitions were poorly attended for all of the reasons noted at the start of this section but also because the approach is one that is only likely to work in areas where the local community is motivated, informed and empowered and /or where the issue in question is emotive.

In comparison most of the Mixed Priority Routes projects did not suffer from poor responses when opportunities for discussion were provided. It may be that the message for many MPR schemes – improving road safety AND enhancing the environment was more compelling than the Inner City Safety Demonstration Project's more safety focused approach.

LESSON LEARNT – when engaging widely be prepared to deal with many and varied issues and priorities and to show some action is being taken. Otherwise buy-in will be lost.

5.3.9 The post-back questionnaire was the more successful method of communication yet this only yielded a 6% response rate from 13,000 questionnaires issued. It is likely that a key contributory factor is that this impersonal approach to engagement was not one that worked with the community in question.

5.3.10 The website and newsletter set up specifically for the project were also poorly received, not generating the response anticipated from the public. In all likelihood this was for similar reasons.

5.3.11 It is worth noting that the ETP activities that were implemented in the later stages of the project did manage to engage stakeholders effectively using a range of pre-existing relationships in the community.

5.3.12 The limited results of the consultation indicated that a very broad range of issues were key to local communities and, in many cases, road safety was either not an issue at all, or was far from the top priority. This created two challenges for later stages of the project:

LESSON LEARNT – engagement is possible with local communities but these may well not be through the conventional routes. In challenging areas all possible engagement channels must be exploited.

- The project team had a range of issues to address that were not directly within their power to influence, so making it difficult to be seen to be responding to stated public concerns.

  "…when you come up against some of these problems it will have been the best to take in like waste management and I'm sure they've got initiatives that they wanted to run down there. They could have linked up to get in, you could have then used them to help and I think it would have worked nicely then because I'm sure waste management, they'll probably feel there is an issue there and how do we get into the community? Here's a project that's trying to work with the community, let's link in with the project."
- Local stakeholders were less likely to engage in discussions where the primary focus was a topic of limited interest.

The use of other routes and avenues into the community is one that was shown to be successful in both Mixed Priority Routes and Neighbourhood Road Safety Initiative projects. In Hull a strong and vibrant traders' association provided a brilliant avenue for communication and decision making and they took a lot of ownership of the final approach themselves. In Oxford the team worked with another voluntary group that already had links into the community for another project.

One major impact of the low levels of stakeholder engagement in some areas was the number of complaints raised during scheme construction arising from a lack of awareness.

This caused significant delivery problems in some places despite blanket coverage through construction information leaflets and other means (see chapter 7).

5.3.13 Review with the Council indicated that one of the challenges was understanding who really counted as opinion formers - of all of the listed stakeholders, it was those non-statutory stakeholders (residents and traders associations) that were of most importance in delivering the project. Whilst it was necessary, or obligatory, to consult with some stakeholders, the support or otherwise of the traders and residents essentially determined the project despite the power /influence or views of the other stakeholders (see section 5.4 on political support for further information).

> *"… we did an extra consultation on [area]. We were unable to come to a view…so we went and did another level of consultation to try and get that rather than the politicians just making a decision. Another example would be the traders' meeting and we gave three options to the traders but they were all viable and they chose the one they wanted and that's the one they got which is built on site and that was at an early stage at the consultation. The traders had so much involvement and so much engagement and the councillor was basically going to agree to anything that you could get all the traders to agree to. I think how that worked, because there was a structured group to consult with and you know, so yes, there's no reason why the other schemes couldn't have worked or elements of the other schemes couldn't have worked as well if there were groups there that had the power and influence."*

LESSON LEARNT – a critical review of stakeholders with experts will identify the stakeholders who will hold most influence over local perception and acceptance.

5.3.14 This knowledge would have improved the team's ability to engage the right people, in the right way at the right time.

Phase 2

5.3.15 With limited feedback from Phase 1 of the consultation process and having not managed to put in place a steering group structure the second phase of the consultation was vital to the success of the project.

5.3.16 The aim of the second phase remained broadly as originally intended at the start of the project – to review options and identify preferred solutions. However, with the poor response from Phase 1 there was always a danger that new and previously unknown issues came to the fore.

5.3.17 It is interesting to note despite the fact that road safety was clearly not one of the key issues for the local community there was not a change in the branding of the project as primarily road safety.

5.3.18 The original intention was to undertake this element of consultation through a postal vote. However, there were two considerations:

- The low response rate for Phase 1 postal responses would not have given the officers sufficient mandate to make recommendations to the Cabinet Member.

- A wide range of options had been developed since the Phase 1 consultation meaning that presenting them in a cogent fashion that would allow postal voting was not an option.

5.3.19 An alternative approach involved identifying the active community groups in the project area and attending their regular meetings to present the scheme options. This removed the barrier of residents having to come to a separate meeting and venue to vote on the scheme options, and allowed the project activities to be fully integrated within the various community group meetings.

The Council adapted their approach (and continued to change it) after the Phase 1 experience. Continual re-evaluation and re-planning went some way to recover.

5.3.20 A concerted effort was made by the project team to make up lost ground following the disappointing response to the first phase of the consultation. But without the established networks through which to channel the activities in Phase 2 it proved extremely difficult to establish links into some communities - many of the groups originally identified during Phase 1 comprised too few members for any considered decision making. Others had simply disbanded after initially being identified for consultation.

> *"We had a list of community groups in the area and we spent the summer phoning them all, trying to gain interest – and a lot of them had disbanded, they didn't exist anymore, or they had one or two people."*

5.3.21 Whilst there was success where stakeholder groups were established (such as the traders on Alum Rock Road), the low turn-out elsewhere meant that options were often lead by engineering judgement rather than local preferences as there simply was not enough opinion provided to take on board during consultation.

5.3.22 The Phase 2 public exhibitions were disappointing in terms of the total number of people attending each exhibition, with just 212 people attending four separate exhibitions throughout the entire project area.

5.3.23 However, it should be noted that the number of people attending the events was still considerably higher than the total number of people attending the public exhibitions held in September and October 2005 where only 55 attended. This was a successful step in the right direction.

The engineering team realised the value of stakeholder feedback and that it provided an insight into the real issues facing the local community that casualty statistics simply cannot.

> *"For some of the projects we didn't set started at all in terms of engaging the public – the steering groups and workshops should have been in place to get the information for the design team. When [the engineering team] realised that was never going to be the case, a questionnaire and a letter went out to the public, for them to either mark on a plan where their problems, fears or accessibility issues were. We got over 800 responses and if it wasn't for that we'd be completely stuffed – it would be like a normal scheme where an engineer would look at the accident statistics; the perceived crime and lighting issues and feeling safe , that we wanted to pick out, would've been missed."*

5.4 POLITICAL INTERFACE

LESSON LEARNT – consider how any project investment maps on to political administrative boundaries at an early stage and consider either changing the project area or planning for careful engagement with ward councillors.

5.4.1 Managing the relationship with elected officials (Cabinet Member and ward councillors) was is a vital part of the process of achieving consensus /reaching compromise and also a necessary part of the decision-making and authorisation process. In particular with limited delegated powers to individual officers (see section 5.4.6) the relationship with the Cabinet Member was particularly important.

> *"The intention was to get the councillors on the steering group – because the feedback from the consultation would have come back to the steering group, they would have taken ownership of it and then the councillors would have already made that decision. OK then, you've still got cabinet members to get round but you know, most of those decisions could have been made earlier on."*

5.4.2 In the early stages in the process the team maintained a good working relationship with local councillors – for example the team held workshops for councillors in advance of the public so that they would be aware of proposals and able to handle any issues once the public had been consulted.

> *"I mean in terms of the steering group system I think what made it very hard was competition between them about what they wanted for their area because you've got five wards and it was obviously felt that, despite what everyone else feels about it and wanting to work together, there is the competition for the money: one of the councillors was upset even two years afterwards that the amount of area they picked up of Birmingham in terms of the money for themselves was very little. Councillors would lose face amongst their constituents."*

5.4.3 However, as the scheme designs progressed there was less contact with councillors and the level of interaction reduced. Their support effectively evaporated during detailed design and construction when residents and, more commonly, frontage holders raised complaints with their local councillors. As a further hindrance, there was an element of competition between different areas within the area across political boundaries.

> *"The first thing I was asked was 'if I ask you tomorrow to justify why certain streets in the opposing ward over there have got funding and three in my area aren't even included in the scheme, could you do that because I'm thinking of asking you to justify your whole project, the whole concept of the project'. That's where you start from."*

LESSON LEARNT – understanding the parameters within which those authorising works is vital. Either ensure that they are bought in to the approach being taken or do not make commitments that cannot be delivered to the public. Early discussions with cabinet members or other officials are essential early in the process.

5.4.4 Additionally, there was political change partway through the project resulting in a change of cabinet member and a policy shift relating to traffic calming schemes.

> *"They [DfT] were looking for an innovative project using constrained techniques and they just didn't work well together and you needed to either go down the constraint route of what we've always done and the engineers almost dictating what goes in with very little consultation, or you need to radically change the governance approach to be a lot more relaxed to allow the public to have more of a decision, you know, more input into it. But the two just didn't work well together because every time that you got a design, you got the buy-in from the public, you then went to the*

councillors to try and get buy-in from them, it would be like 'no, you can't do that' and 'no, we don't like that', and it's just constantly changing it and having to then go back to the public and go 'well we can't do this' and they were like 'well it's not our scheme then is it? It's nothing to do with us now'."

5.4.5 Further discussion on the impacts can be found in Chapter 6 (Implementation).

5.4.6 The interface with the Cabinet Member was also vital to the progress of the project. Different authorities will have different decision-making approaches but for Birmingham the approach was to have very limited decision-making powers delegated to the officers at any stage in the process. Officers therefore had to seek approval for:

- scheme options being taken for consultation;
- results and conclusions to consultation;
- detailed scheme design issues; and
- procurement decisions.

5.4.7 On a project of this scale the degree of interface required to take forward individual elements was high and this put significant pressure on officers and the Cabinet Member alike. In this case the challenges faced were greater because:

- there was a change in balance of power in Birmingham mid-way through the scheme development programme which meant the incoming Cabinet Member did not agree with some of the basic building blocks of the schemes; and
- the Cabinet Member put particular weight on the opinions and objections of local ward councillors and so, with waning support for some elements of the scheme it was difficult to get them improved.

5.4.8 It is evidence that the governance and management structures employed on the project had a significant bearing on the outcomes and quality of delivery.

5.4.9 The impact of this was that feedback from consultation events was over-turned leading to a perception from those engaged in discussions that their input had been disregarded (see section 6.2) with inevitable impacts in terms of trust and involvement later in the process.

5.5 IMPACTS ON THE DESIGN PROCESS

5.5.1 The extremely low response rate had a number of implications:

- Scheme options had to be developed from extremely limited data, resulting in uncertainty about whether the real issues and challenges were being addressed.

  "There wasn't a big turnout [to phase 2 consultations]. You might have a street with 150 houses on it and one person or no people turned up, so you couldn't really make a judgement on that. In the main the options have been developed from engineering judgement rather than personal preferences – there wasn't enough opinion provided."

- Additional time had to be spent by the design teams developing their own understanding of the issues, with knock-on effects to budget and programme (Chapter 7).

  "Following our first consultation, it took so long to get back out with scheme designs, nearly a year, because of the size of the area and the level of work that the engineers were asked to do in terms of detail on each street …"

- Branding of the events on the road safety theme when this was not the primary concern of the local community.

  "I think one of the hardest things though is that we've picked out a subject, road safety, which isn't actually high on the agenda of these types of communities. You know, you go to a different part of […] and it would be probably one of the top things that they'd be looking at but you know, the area that we're looking at, they've probably got half a dozen if not more things that they would rather you solved on the streets first."

- Options were often lead by engineering judgement rather than local views with consequent downstream approval and implementation risk.

5.6 LESSONS LEARNED

5.6.1 Whilst clear that early shortcomings in the consultation had a knock-on effect felt through the life of the project, it would have been impossible to mitigate their effects entirely. A project of this size is unlikely

LESSON LEARNT - It is vital to involve ETP teams and other professionals experienced in community engagement.

to be delivered without objection or opposition regardless of how effectively communities are engaged.

5.6.2 There will inevitably be a point at which the amount of time and resources dedicated to stakeholder engagement throughout the life of a project begin to outweigh the benefits – a 'line in the sand' must be drawn at which point objections must be weighed against the strategic scheme objectives. The experiences in Birmingham demonstrate that political support is essential when it comes to this point.

5.6.3 Key project staff contributed to a post-completion project review which included the identification of lessons learned. From early on in the project, lessons learned were being fed back into policy and practice at Birmingham and applied in projects elsewhere. This feedback is incorporated into the lessons learned identified below.

Technical

- Postal consultation /scheme information is frequently ignored. Many stakeholders had no awareness of the scheme despite being in areas which Council staff had delivered letters and leaflets personally to ensure full coverage, therefore one-to-one contact is the only way to ensure information is received.

- Consultation must be right first time – it might not be impossible to recover the project if early engagement has not been successful but the effort required to do so will be enormous.

- Consultation strategy needs to be established that maintains contact with the public throughout the life of the project.

- A contingency plan is needed if consultation fails.

- There is a need for education as part of the consultation to explain road safety engineering measures.

- Visualisations should be widely used to help the public build a picture of the scheme rather than relying upon people interpreting plans.

- Promotion & publicity needs to be integrated into natural community activities (via schools, Mosques, community centres and other existing networks).

Resource

- There is a negative perception of engineers by the public and it is possible that they should act as technical support for consultation activities by a dedicated /specialist engagement team and not lead consultation themselves.

- The ETP team had been working with existing community groups to get responses as part of their programme development and therefore had existing contacts /networks in the community. Greater use of this kind of approach (use of existing networks where possible) and earlier involvement of the ETP team would have been beneficial.

LESSON LEARNT - Undertake research on all potential mechanisms for engagement i.e. existing links into the community from different Council departments.

- The design team was missing any information regarding meaningful attitudes and desires of the community. Not involving a dedicated engagement team impacted upon the success of the steering group resulting in this lack of understanding by the design team;

The success of schemes designed to bring communities together as part of a shared experience in developing an approach to improving their area is mixed. The more contained and manageable scale of the Mixed Priority Route schemes seems to have contributed the success of these schemes whilst the Inner City Safety Demonstration Project's large area probably made the tasks very difficult.

Management and leadership

- A lack of inroads in to local communities and a lack of experience undertaking large scale consultation will significantly increase the risk of later problems with regards to public awareness and support.

- Strategic objectives are likely to be overshadowed by individual self-interest and broad political support at a local level is essential to overcome this.

- Total project budget (£6M) was widely misinterpreted as each community assumed that the whole budget was to be spent in their area with no comprehension of the limitations of the funding over such a large geographical area.

- Consideration should be given to the key roles and responsibilities and the links required both internally within the Council and with

partner bodies. The management structures should then be set up to positively support these relationships.

5.6.4 There was difficulty reconciling possible tensions between the stated aims of improving social capital and a community engagement methodology in which residents would be involved in planning and selection of options. There is scope for confusion here over the function of community engagement – whether it is to ensure the delivery of pre-existing aims; or to decide what needs to be done. Future projects will need to address the extent to which local communities may expect to challenge the stated aims of projects and /or be able to influence the aims and objectives of schemes, in order to avoid raising community expectations which are subsequently dashed.

Institutional: Community links

5.6.5 The level of linkage into the community is something which changed for the better throughout the life of the project as the Council moved towards more localised area management functions through a network neighbourhood coordinators and management teams. This means that there are now local representatives from the Council working in the community on a day-to-day basis through which relationships and networks could be grown.

5.6.6 The Council's neighbourhood management system may have helped foster community engagement, but unfortunately it was introduced at a late stage of the project's development and so was not available to support community engagement in the early phases. Such local strategic partnerships provide a more robust basis for democratic community engagement.

5.6.7 This kind of 'root' network was not available at the start of the project but did help the ETP team to develop community contacts and develop networks without the resources that would have been necessary to match this success at the beginning of the consultation phase.

Political

5.6.8 The expectations and aspirations of the scheme must be aligned with those of the political decision makers to ensure that commitments made during consultation can be fulfilled.

5.7 CONCLUSIONS

5.7.1 The project was conceived as an innovative approach to widen the potential benefits of traffic interventions to include aspects of social capital including perceptions of participation and community well-being. However, there was a heavy reliance on a partnership infrastructure which was not fully in place at the start of the project. Where such innovations are planned in future, careful attention needs to be paid to such infrastructure, and the manner in which complex partnership working between agencies will be achieved.

5.7.2 It is difficult to ascertain how these issues might have been mitigated during the consultation process. Whilst there will inevitably be opposition to schemes of this nature, largely due to commercial sensitivities, it is clear that the impact upon scheme delivery might have been mitigated (formal opposition incurred considerable delay to some elements). The scale of the project does raise issues which, whilst not unique to this kind of scheme, potentially amplify and exacerbate any shortcomings in terms of stakeholder engagement.

6 Scheme Design

Scheme design covers the process from identification of outline concepts to inform the consultation process through to detailed design as part of the contract tender and delivery process. This section covers the design process, the interaction with the stakeholder engagement activities and lessons learnt through the process.

With some elements of the consultation process lacking sufficient input from local stakeholders to shape the design, it was necessary to revert to a traditional road safety engineering approach for some scheme areas. This was not the originally intended approach but rather more in response to deal with some of the shortcomings of the earlier phases of consultation.

This is not the case for the whole scheme and in areas where public engagement was more successful, or where stakeholders were suitably driven to contribute to the design process (i.e. traders in Alum Rock Road), scheme design was sympathetic to the needs highlighted. It proved difficult for the designers to maintain empathy with the projects aims and objectives as stakeholder's concerns were far more concerned with everyday operational implications such as on parking, loading and traffic flow.

6.1 SKILLS AND RESOURCE ISSUES

6.1.1 Compounding early issues with consultation, there were also issues surrounding resourcing which impacted on progressing the scheme design, largely relating to the availability of staff and appropriate skill sets as the design progressed.

Design

6.1.2 The design process fell into two distinct phases of activity, requiring a significant spread of skills and experience. The initial phase of the project required traffic engineering and road safety skills capable of:

- analysing casualty data;
- assessing and reviewing the interaction of vehicles and vulnerable road users;
- development of outline /feasibility designs for road safety and traffic management; and

- interaction with the public and other stakeholders.

6.1.3 Following on from the identification of the preferred scheme these complex urban schemes need design skills to allow the development of realistic, deliverable and buildable schemes for which cost effective quotes can be received from contractors. This requires skills in:

- detailed design;
- development of bills of quantities;
- construction and traffic management; and
- liaison with utility companies

Getting the skills mix right in the team is essential and being ready to change those resources as the project progresses is also vital.

6.1.4 In the initial phases of the project the core team was resourced, in the main, by highway engineers who were making best endeavours to assess casualty data and to develop and deliver consultation activities. The Council did ultimately react to the difficulties this mismatch between skills and project requirements and delivered engineers with traffic engineering and road safety skills.

> *"Because the process and the way that this project is shaped, it's as though it is naturally going to take that much longer than a normal engineering project and I don't think those kind of considerations and those factors were kind of taken into account and therefore because you're kind of feeding back so much to the public and it's not just a simple consultation process, you know, each time you feed it back the amount of work that's required is huge and I don't think it was fully appreciated that it's not just a simple exercise of designing, consultation and building, it was a lot more drawn out process and I don't think that enough time was given to the project."*

6.1.5 Once the schemes developed to the preferred option stage the extensive resource within the Council was able to take the projects and deliver extremely effectively over a very short timescale. This is testament to the importance of delivering the right skills, at the right time for projects of this nature.

Project management

6.1.6 One issue which has impacted upon project delivery and continuity is the turnover of staff through the lifetime of the project. This was a particular issue with the lead project manager, with four different project managers being employed on the project from inception through to completion.

6.1.7 Skilled and experienced project managers able to manage diverse skill sets, oversee programmes and resources, and identify risk areas in the programme are crucial for effective delivery.

> *"And again this comes back to the point of an engineer leading a project that needs an expert project manager. The majority of the team were engineers that come up with engineering solutions; I would say that it wouldn't be within the engineers' remits to come up with innovative non-engineering solutions, and it goes back to the start of appointing the right people with the right skills. It also links back to the discussions about what's in the bid and how that translates to the quality of life aspects of the project. They are central to the bid – it was never just an engineering problem."*

LESSON LEARNT – good project managers are essential and should be a priority in resourcing the scheme. They can change through the project as long as the handover is well-managed and comprehensive.

6.1.8 The City Council delivered these skills with mixed success at first but ultimately delivered the project with great competence in difficult circumstances not, in the main, of their own making.

6.1.9 The single most challenging element of the whole project was the identification of a project manager able to manage the many and varied resources and the demands placed upon them. The Council had significant difficulties in sourcing the right person, despite the level of resource available to them. This is indicative of the challenges facing the civil engineering sector in terms of skills shortages.

> *"And again this comes back to the point of an engineer leading a project that needs an expert project manager. The majority of the team were engineers that come up with engineering solutions; I would say that it wouldn't be within the engineers' remits to come up with innovative non-engineering solutions, and it goes back to the start of appointing the right people with the right skills. It also links back to the discussions about what's in the bid and how that translates to the quality of life aspects of the project. They are central to the bid – it was never just an engineering problem."*

6.1.10 Approximately half way through the programme appropriate resources were finally identified and immediate differences were seen. A definitive programme was developed, key milestones identified and resources began to be managed effectively.

> *"I think you need stronger leadership of the project; a stronger project leader who knows the issues and can communicate them to people who aren't aware of exactly what's needed. I think we're the blind leading the blind – it needs a strong figurehead who understands engineering but also has the knowledge and dedicated time for the broader issues- it needs political support and people who will give a positive steer - at the moment we seem to be floundering."*

6.1.11 In previous demonstration projects the most effective delivery has been seen when a single project manager works on the project from inception to delivery. However, in this case there were three different project managers during the second half of the project. These changes reflected key stages in the project programme when new skills and requirements were needed. Key to the success of this approach was the comprehensive handover between managers that ensured complete continuity of knowledge and purpose.

From a delivery perspective by far the most successful Mixed Priority Routes project was Oxford – delivered only 4 months behind programme for a 3 year project. The project had a dedicated project manager who was responsible for programme and budget management and who stayed with the project from start to finish.

Project governance

6.1.12 A project board was established comprising a number of senior staff from within the Council as well as representatives from the Chamber of Commerce, the Department for Transport and the Council's term consultant, Atkins. The principal aim was to establish a mechanism through which the entire project could be monitored and evaluated throughout the delivery process whilst providing access to key decision makers on a regular basis for the project team.

6.1.13 The project board provided a forum for discussion and challenge and was crucial in making key decisions on programme issues. However, it was not an appropriate forum for discussing the technical content of the project.

6.2 KEY DRIVERS AND INFLUENCES ON DESIGN

Accident analysis

6.2.1 Accident investigation was an early part of the design process with cluster sites being identified for targeted treatment and those accidents not following clear patterns given consideration for route treatment or broader area measures depending upon their distribution. In order to prioritise targeted junction treatments within the broader scheme, the accident analysis graded sites for comparison against West Midlands Average Annual Accident Rates for corresponding junction type.

6.2.2 Further development of the design was influenced by a broader range of factors:

- responses to preliminary designs and scheme options during consultation;
- safety issues raised by members of the public at a number of locations throughout the area;
- physical constraints from utilities;
- design reviews in response to the increasing complexity of design; and
- objections to Traffic Regulation Orders that could not be resolved.

Other data

6.2.3 A wide range of other data was used to feed in to the design process:

- traffic surveys including cordon counts, junction turning counts, classified counts, passage counts and journey time surveys (including buses);
- speed surveys and classified speed surveys;

- pedestrian footfall counts; and
- parking surveys (including all loading and illegal parking /loading activity).

Other data sources used to inform the design process on other demonstration project schemes include:

- pedestrian crossing surveys (formal and informal crossing movements);
- bus boarding and alighting counts;
- street lighting assessment;
- noise and air quality; and
- crime incident locations.

Developing schemes with stakeholders and elected officials

6.2.4 The plan for the development of the engineering schemes was intended to be fundamentally driven by engagement with the local community.

6.2.5 Key stages envisaged in the development of the schemes were:

- collection of a wide range of data to inform the design process, combining quantitative data such as traffic counts and casualty statistics with stakeholder input;
- the development of options (in conjunction with stakeholder groups) for wider consultation;
- further development of preferred options through further stakeholder engagement; and
- final approval through the formal Council channels (officer and cabinet member).

LESSON LEARNT – the project team should understand the parameters of design before work commences, to understand whether radical solutions could be acceptable or not.

6.2.6 Whilst this approach may sound similar to a conventional scheme design and development process, what stood out as aspirational was the level of engagement throughout the design process that the Council intended to deliver. The design teams would work very closely with stakeholder committees in each of the areas to act as sounding boards for the scheme options. The intention was that this would result in a bottom-up, community led approach to the design rather than the top-down approach generally preferred by the Council in its day-to-day activities. In reality this approach was challenging from the outset, as discussed in the previous chapter.

6.2.7 In some areas there were other constraints to design:

> *"We had the misfortune in coming in directly after a high profile scheme which involved parking restrictions in front of shops. I think that some feared one of the designs would be politically sensitive, so we went back to option C – it is easy to implement, and satisfies the traders – but it's a shame that so much work went into a radical scheme, but the plug was pulled. In terms of what we're left with, I would find it difficult to pick out the bits that fit the brief and how it would impact accessibility."*

> *"In the Alum Rock scheme, we took three options to officers, traders and the public. The traders vetoed options 1 & 2 and residents rejected option 3!"*

6.2.8 There were problems with the political aspect of scheme development resulting in constant changes as the design teams tried to reconcile local and political requirements.

> *"A lot of the Coventry Road scheme was left out. We wanted to do an innovative streetscape but it was largely vetoed – not much of the design was left. In changing minor details, you can be left with very little of the design."*

> *"Political objections meant that we were not able to put in junction-tables when this was the preferred option. It was a political decision rather than an engineering or stakeholder decision – and this veto made partnership working difficult. At one Ward committee we got a lot of stick for this – "why ask us when we cannot have it". This makes people reluctant to engage in the future.*

Alum Rock Road was, for a long time, the most intractable design challenge for ICSDP. However, with the parking issue resolved it became one of the simplest to deliver.

Last minute changes [to designs throughout delivery] … but you could argue that while this is a disaster for the rational engineer, it is a success for the public."

6.2.9 With the early shortcomings of consultation resulting in a lack of engagement with the community and later feedback being overridden by the political decision makers, it is probable that reaching a consensus later on would be absolutely impossible where stakeholders had become disillusioned with the scheme. This serves to highlight that even where the public is engaged, political stakeholders must be fully involved in the process throughout.

6.2.10 Stakeholders and elected officials did raise a number of requests and suggestions that fed into the design. One particular example is the overwhelming response from traders and the public over the parking issues on Alum Rock Road.

6.2.11 Even with rationalisation of the on-street provision, it was clear that there was a need for additional parking to be accommodated to improve frontage access for loading and reduce congestion on the route. An opportunity came for the Council to acquire a small site at the west end of the route to convert to a short-stay car park. This was not only essential to help address the illegal parking issues that impact upon safety, but helped to establish greater public and stakeholder support – there was a clear message that further waiting restrictions were considered a blunt instrument as a standalone means of tackling parking problems.

Budgetary considerations

With so much activity it was easy to lose sight of one of the key constraints – budget. This led to a need for significant reduction in costs and specification.

6.2.12 Assigning budgets for the projects was initially undertaken in a very simplistic fashion. Areas were designated for treatment on the basis of the casualty record and the nature of the street environment. BCC then made some broad-brush assumptions on the level of casualty reduction likely to be achieved by a comprehensive treatment to calculate a first year rate of return. Budgets were allocated in proportion to the relative levels of return for each of the areas.

6.2.13 In addition to an allowance for physical works, budgets were also set, at a broad level, for:

- project management;

- evaluation and data collection; and
- education, training and publicity.

6.2.14 Some design work had already been completed prior to a re-evaluation of costs. There was evidently a lack of consideration for on-going budgeting and costing checks as part of the management process. As a result, when costs for the physical works were assessed, there was a significant mismatch between the estimated and budgeted costs.

6.2.15 The Council then began to review its proposed programme of works (and associated costs) against the budgeted costs. The initial cost estimate for the schemes indicated a significant potential overspend as illustrated in Table 6.1.

Table 6.1: Initial scheme cost estimate

Scheme	Costs (£m)	
	Original Budget	Estimated Cost
Alum Rock Road	1.060	2.918
Coventry Road	1.190	1.210
Green Lane	1.340	1.944
Ward End	1.230	1.581
TOTAL	**4.820**	**7.654**

6.2.16 This projected overspend resulted in the Council undertaking a comprehensive review of the costs and design elements of each of the projects. This process resulted in value engineering changes. Whilst this was an effective means of reducing the overall value of the schemes the process lacked a value engineering approach that sought to maintain focus on the outcomes of the schemes.

Significant cost cutting was achieved and in many cases the philosophy of the scheme was still maintained. With capital-constrained designs the simplest approach is probably the best.

6.2.17 In the context of an aspirational scheme design, seeking to address all the concerns of stakeholders and meet the aims and objectives of the project, the lack of budget monitoring is better understood. Meeting these demands is the most important aspect at the development stage and as such the budgetary impact may not be realised until later on in the process.

6.2.18 The same issue was apparent at a number of authorities delivering schemes for the Mixed Priority Routes demonstration project. In these instances a variety of approaches were taken to dealing with the shortfall including drawing on maintenance budgets (off-setting future maintenance costs), downgrading materials, removing design elements not essential to scheme aims or simply seeking to secure additional funding if considered important for the scheme.

6.2.19 The impact upon the schemes is summarised below. Additional savings were achieved from a reduction in the level of contingencies and statutory undertakers' fees associated with the design changes.

Summary of scheme elements removed through value engineering:

Alum Rock Road

- Automatic bollard system (£1,053,000)
- Changes to loading bays (£213,396)
- Cancelling the purchase of an additional site for a car park and its construction (£140,000)
- Street lighting improvements (£75,000)
- Residents parking scheme (£50,000)

Coventry Road

- Street lighting improvements (£49,000)
- Crossing facilities (£48,550)
- Junction improvements (£42,000)
- Build-outs and tree planting (£42,000)

Green Lane

- Mini homezone (£200,000)
- Off street car parking provision (£100,000)

- Changes to crossings (£69,000)
- Footway improvements (£41,600)

Ward End

- Mini home zone scheme (£200,000)
- Revised build outs (£43,000)
- Cost of land (£40,000)
- Lighting improvements (£25,000)

6.2.20 It is worth noting that the Council was able to exercise a degree of flexibility with regards to the scheme budget using LTP funding to extend some programmes of work beyond the DfT funding deadlines. The ETP programme was extended and provision also had to be made for delayed construction works towards the end of the delivery period.

6.3 IDENTIFYING ADDITIONAL FUNDING

6.3.1 Identifying and securing additional funding for the schemes proved to be a significant challenge for the Council. Whilst objectives were set that provided opportunities for cross-funding there was little consideration of how these could be used to develop other funding streams.

LESSON LEARNT – most authorities do have some significant flexibility in moving capital budgets around. This can be used to reduce delivery pressure at the end of the project and dilute the impact of funding deadlines on projects.

6.3.2 It is understood that part of this problem lies in the scale of the City Council as an authority. It is large and disparate in nature, making joined up planning and funding quite difficult. However, with the delays to programme experienced and the relatively compressed timescales for delivery, it was more often the case that time restricted (to a single financial year) funding from other parts of the Council or other organisations could not be appropriately aligned to meet match funding criteria.

> *"…it's great that this project is stirring everything to get more money in for the area but it would have been better if there had been a coordinated approach right at the beginning so that actually the match funding came through at the same time as*

actually we were designing and we were constructing so that actually, the community sees a much more coordinated approach rather than going 'OK, we're going to do a load of work in your area and then in eighteen months' time when we get the rest of the match funding possibly through, if we ever get it through, then we'll come back and do more disruption to you'."

6.3.3 Whilst opportunities were considered for funding from other Council departments, there was no concerted effort to pursue funding from external sources. This was an approach that lots of other authorities have taken when delivering demonstration projects with funding sources ranging from regional and national bodies through to the European Union, with some levering in significant sums. To some degree this reflects the changing economic conditions at the point when the project was moving into the construction stage, but as the above quote demonstrates, it was recognised that this should have been considered at the start of the project to allow for coordination of any awards.

6.3.4 This is counter-balanced by the ease with which monies within the highways team can be transferred from one financial year to another. When the Council was tasked with looking at integrating the inner city schemes with other capital works programmes this was achieved with ease.

Mixed Priority Routes schemes managed with great success to obtain additional funding. The simplest approaches were through the bringing forward of maintenance spending – this is a good means of delivery as maintenance spend has great flexibility in terms of programme of spending.

6.4 LESSONS LEARNED

6.4.1 It was acknowledged by the project team that there would certainly be more consideration given to wider benefits and objectives if a new scheme were to be started after its experience on ICSDP.

6.4.2 With the length of programme, the number of project managers and staff involved and the emphasis of the project changing as pressure to deliver increased, there was the inevitable tendency to lose sight of the core aims and objectives of the scheme.

"I mean, I don't even know what's actually in the bid document, I only know second hand that it's about things like accessibility,

perhaps training and attitudes as well as pure road safety. I think we're getting better at taking accessibility into account, but we still only look at it from an engineering point of view – 'can people cross the road to get to the bus stop?'. I've not had any direct involvement with the ETP work. I'm not sure there is anybody with an over-arching role looking at all the different elements. [former project manager's name] may have done, I'm not sure."

The organisation of local authorities and the communities they serve change frequently. With the changes presaged in the Localism Bill these structures will change again. However, there will always be local representative bodies and these should always be considered at the earliest opportunity.

6.4.3 It was acknowledged in feedback from project officers that the lessons learned from the issues with stakeholder engagement would be unlikely to occur in future – the impact throughout the life of the project was considerable.

"Starting it now, I would look to use constituencies and local strategic partnership arrangements to work up the detail of the project. Neither was available when we started, but now there is an existing framework to better develop partnerships. I'm not clear about the level of involvement now with these structures, but we are much better linked to constituencies to identify local issues and their possible alignment with road safety targets."

6.4.4 Acknowledging the difficulties in funding these kinds of schemes in future with less funding available, the missed opportunity in terms of pulling in wider funding is something that cannot be afforded in future.

"Pooling of strategic capital between partners is important for the future. If you bring expertise together, you can bring budgets together – this was not where we started from. As capital expenditure cuts are anticipated for the foreseeable future, opportunities to piggy-back funding and exploit opportunities for joint working will be required – joined up work to deliver more."

7 Implementation

With the earlier phases of the project extending beyond their programmed timescales, implementation of the final scheme on the ground was to prove one of the most challenging aspects of the projects. In this context it was also one of the most successful stages of the project where lessons were learned from earlier problems and delivery was successfully managed by streamlining of procurement procedures and effective resolution of a number of issues encountered with stakeholders.

7.1 SKILLS AND RESOURCES

Identifying a project manager with the right skills and personality made the task of delivering this project much easier.

7.1.1 With construction almost certainly undertaken by third party contractors, the primary role of the authority during this stage in the process is to act as co-ordinator, arbitrator and first point of contact with the public. Schemes of this nature, in complex, urban areas are inevitably problematic and require contact supervision to ensure delivery.

7.1.2 A skilled and knowledgeable project manager is required for this role, who has a firm understanding of construction and contracting and has the diplomatic skills to deal with the concerns expressed by those who are affected by the construction activities. For this project the project manager role was full time during the period immediately before and during construction. The capability and commitment required when multiple sites are on the ground at the same time should not be under-estimated.

7.2 KEY PROGRAMME DRIVERS

LESSON LEARNT – high staff turnover is the norm for projects of this length being taken forward through a local authority team. The senior management team should factor this into its plans and costs and actively manage the handover process to ensure continuity of purpose and knowledge on the project.

7.2.1 Final scheme delivery dates varied considerably from the original programme with delays being occurred throughout the consultation and design phases. There were a number of influencing factors that impacted upon scheme delivery, some of which it would be difficult to address even in retrospect. Among these factors are:

- High staff turnover, particularly at project manager level, inevitably incurred delays as replacement staff got up to speed on a large and diverse project (this was mostly the case during the earlier stages of the project).

- Consultation activities extended beyond those originally programmed, partially due to underestimating the scale of the task but also due to the difficulties engaging the community in the first round of consultation.

- Whilst decision making on a day-to-day basis was devolved, there was difficulty gaining final cabinet approval for many different aspects of the scheme due to the conflicts between the schemes strategic objectives and issues with stakeholders.

7.2.2 However, in response to these issues, the Council instigated a number of changes to the management of the project to ensure that the later stages, particularly design approval through to construction on site, were not significantly delayed any further. As a result of this, a significant amount of time was clawed back in the programme to ensure delivery. The main actions that facilitated this are as follows:

- *Well defined project manager role* – As the scheme progressed the Council developed a better idea of the skills and experience required of the project manager. As a result the performance of the project improved progressively.

- *Project Management Handover* – The final change of project manager was at a critical point in the delivery of the project; between completion of the detailed design and letting the works. The Council ensured that the handover process was seamless with both project managers working in tandem to ensure that no problems would occur.

7.3 PROCUREMENT PROCESS

Letting the construction contract

7.3.1 The Council's standard procurement process for contracts such as this had many steps designed to ensure value for money and to reduce risk. These steps were:

- prepare cabinet report for approval to go out to tender, including internal review, gateway panel approval, informal cabinet member pre-meeting and full meeting for cabinet decision;

- preliminary design development – finalise drawings and prepare estimates;

- place OJEU (European Journal) advertisement and observe subsequent notification period;

- preparation of tender and contract documents;

LESSON LEARNT – the procurement process defined by the Council had a huge impact on project delivery timescales. A revised approach was more flexible and delivered much more quickly with only limited additional risk being taken by the Council.

- statutory minimum tender and tender assessment periods; and
- approvals period (tender acceptance) – cabinet report preparation and review, meeting and approval prior to acceptance.

7.3.2 With little time in the programme to allow for the full competitive tendering process to be followed, the Council took a different approach to employing contractors on the scheme. Contractors were asked to provide two different sets of costs for comparison, a scale of staff rates and then costs for a range of 'standard' materials /works as deemed appropriate for the project. Contractors were then employed based upon these rates and costs with additional 'non-standard' aspects of the work quoted separately on an on-going basis. This enabled construction to start before the detailed design was fully complete as the process negated the need for a full Bill of Quantities for the each element of the scheme, whilst costs submitted by contractors enabled the Council to get an indication of the likely costs against the designs as they were completed.

7.3.3 The original programme for procurement sheds a light on just how much programme time was recovered to allow a realistic period of time for actual construction of the scheme. Procurement was originally anticipated to take nine months from starting the process to construction beginning on site. This was subsequently reduced to around five months; however the overall impact on programme is possibly greater as it allowed extra time to complete design by virtue of the staggered on-site delivery.

Many of the Mixed Priority Route projects adopted novel approaches to the letting of contracts and the subsequent management of the construction phase. There were few instances where problems occurred and it would seem that to challenge the conventional approach can deliver significant timescale benefits with few downsides.

7.4 CONSTRUCTION

Communication with frontage holders

LESSON LEARNT - The time and effort required to deliver a series of engineering schemes, all being constructed at the same time in different communities, should not be under estimated. Plan for a significant and continuous resource input and have key decision-makers lined up to make quick decisions where necessary.

7.4.1 Every registered address within 500m of any construction activity received an information pack and anticipated delivery programme prior to construction starting. This had contact details for the project team and any particular queries were generally directed to the project manager. The project manager also became the default point of contact for all complaints relating to the scheme, mostly from frontage holders directly affected by the works but claiming to have no knowledge whatsoever of the scheme.

7.4.2 At this stage in the project, there was no alternative but to have one central point of contact, however the amount of resulting liaison necessary took up an enormous amount of the project manager's time during the most crucial stage of the project. Whilst this demand on resources could not have been easily anticipated, the impact would suggest that it is prudent to allow extra resource to handle stakeholder liaison for the project manager.

7.4.3 Furthermore, the objections raised in some areas and the subsequent lack of political support resulted in some small elements work being completely re-designed or even removed from the programme despite contractors being out on site ready to begin construction.

> *"When you put a crossing in, the perfect location doesn't exist, it will affect either a property or a business or something. So you go through the consultation process, you get to site and somebody will still tell you 'what are you doing? What's this game? What's going on here?' and before you know it, councillors are out going 'oh yeah, well, if they're not very happy I think, you know, we need to consider what you're doing here'. The next you know the work's stopped and you're waiting for a higher level decision on whether you should carry on or not."*

7.4.4 There were also instances in two different areas of frontage holders wilfully committing criminal damage by removing bollards that were intended to prevent vehicles from parking on, or mounting, the footway. This unprecedented response demonstrates how emotive the reaction could be on the ground towards even the smallest elements of work.

Many inner city areas will have traders who are on the margin of viability and who need to maximise returns wherever possible. Being mindful of the key times for businesses to make profit is essential. In the case of Birmingham, the Christmas period represented normal trading to most of the businesses with other cultural and religious festivals at other times of the year being far more important.

The businesses' opening times were different as well, opening mid to late morning but staying open well into the evening. So programming of on-street works day-by-day was also important to keep traders onside.

7.4.5 Beyond these problems in specific areas, contractors themselves were able to work with frontage holders to ensure minimal disruption to businesses and, on the whole, the construction scheme was unaffected by the kind of frontage access and traffic management issues that one might anticipate on a project of this scale.

7.4.6 One issue which did not arise, and which might otherwise be expected to create further problems, was that of programming works for delivery around the needs of the traders and wider communities. With a predominantly Muslim population, work continued throughout the Christmas period and furthermore, most accepted that works could not be implemented without significant disruption. A large proportion of stakeholders simply wanted the works to be finished as quickly as possible to minimise the period of disruption, rather than entering into negotiations over things like working hours and traffic management (frontage access was maintained throughout and works during trading hours) as might normally be expected. In this respect, the Council's approach to managing construction was extremely effective.

Statutory undertakers

7.4.7 Co-ordination of utility companies was extremely challenging and resulted in delays on scheme elements throughout the project area. This was further exacerbated in some places where multiple diversions were required as it proved to be impossible to get different companies to work together to plan and implement works. Further to this, where multiple diversions were required, it became extremely difficult to get any cost information as proposals were returned by undertakers that would then impact upon others diversions.

7.4.8 Ground penetrating radar (GPR) surveys were undertaken in some areas, but not throughout the scheme area. Whilst this may have helped with some incidences of drawing inaccuracies, the main issue was with design and delivery of diversions rather than delays caused by unidentified apparatus.

7.4.9 It may be argued that, in inner city areas with associated infrastructure constraints (narrow street layouts, older existing infrastructure, challenging traffic management), utilities may present a greater budget and programme risk than other locations.

7.5 LESSONS LEARNED

Stakeholder support

What was not anticipated was the fact that the limited engagement achieved during the design phases would have an impact on final project delivery. At least one project was permanently removed from the programme as a result of complaints immediately prior to construction commencing.

7.5.1 The schemes that were easier to implement were generally those where local community groups were active and influential (such as Alum Rock Road Traders Association). This was key to obtaining 'buy in' from the traders that resulted in no difficulties later on in the design process or confrontation on site. By contrast, Coventry Road was more difficult to implement as there was not an active traders association to make decisions. Despite it being possibly the most difficult scheme to implement in terms of traffic management and maintaining access, Alum Rock Road had few of the issues experienced elsewhere during construction.

> *"… we did an extra consultation on [area]. We were unable to come to a view…so we went and did another level of consultation to try and get that rather than the politicians just making a decision. Another example would be the traders' meeting [in Alum Rock] and we gave three options to the traders but they were all viable and they chose the one they wanted and that's the one they got which is built on site and that was at an early stage at the consultation. The traders had so much involvement and so much engagement and the councillor was basically going to agree to anything that you could get all the traders to agree to. I think how that worked, because there was a structured group to consult with and you know, so yes, there's no reason why the other schemes couldn't have worked or elements of the other schemes couldn't have worked as well if there were groups there that had the power and influence."*

Project management

7.5.2 Delivery of the engineering schemes was very successfully managed following lessons learned earlier in the project with regards to staff turnover affecting continuity in project management. Two project managers were involved through detailed design and construction with a crossover handover period ensuring a seamless change and clearly identified roles, responsibilities and clear goals identified to provide the necessary structure in which to deliver the project.

7.5.3 With a condensed delivery programme for the implementation of works, effective project management at this stage was crucial to maintaining momentum. The project manager ensured that the issues experienced with regards to last minute design changes and public opposition did not have a significant impact upon the delivery programme.

Procurement

7.5.4 The project's procurement strategy was essential in ensuring delivery of the scheme largely within the funding timescales and contributed to regaining a considerable portion of time compared to the original programme. Whilst this is likely to have contributed to higher construction costs, such innovative approaches need to be considered in such circumstances.

8 Education, Training and Publicity

ETP was always considered to be a fundamental part of the project, albeit in a supporting role to the engineering interventions. As a result the implementation of the proposed schemes was delayed (in most cases) to tie in with the implementation programme. Since that time the value of the ETP, working across organisational borders, has been recognised and some elements of the approach are funded beyond the end of the project.

8.1 INTRODUCTION

Despite a delayed start, ETP projects have been developed and delivered to every school in the area as well as through mosques and community groups.

Furthermore, through providing training and support, many programmes will continue to be delivered when funding ends.

8.1.1 With child accident rates being particularly high throughout the project area, it was considered important to develop a programme of ETP initiatives. This was widely supported by local schools, emergency services and the City Council Road Safety Team. The use of ETP was generally considered to be something that would support the engineering schemes and would therefore be delivered either during or soon after construction. As a result, the development of a specific ETP programme tailored to the project area did not commence until 2007.

8.1.2 The programme was developed following a year of detailed research with some projects aimed at specific age groups and others at a broader audience, including parents. Many of the activities centred on delivering educational initiatives in local schools, including the Madrassa (Islamic school) at Green Lane Mosque. All engaged the help and support of the schools, religious leaders and parents as a means of encouraging participation and maximising the impact of the schemes.

8.2 SKILLS AND RESOURCES

8.2.1 ETP requires a very specific set of skills and experience that is different but complementary to the skills required to develop and deliver road safety related engineering schemes.

8.2.2 The skills required include:

- comprehensive knowledge of current state of best practice for ETP;
- excellent engagement skills;
- excellent networking and negotiation skills; and

- imaginative and challenging – to consider the real needs of local people and to develop strategies that meet their needs in a way they understand.

LESSON LEARNT – specialists with the right skills can create focus and insight that the general engineer or planner cannot.

8.2.3 The early stages in the process of developing ETP requires an assessment of community need and how ETP can complement the engineering schemes and address those aspects of road safety that engineering interventions are least able to do.

8.2.4 The Council certainly did not recognise this in the early stages of the project and this was to the detriment of the project as a whole. Early analysis and development of ETP proposals was undertaken by road safety experts with a singular focus on casualty statistics, which did not help the development of a broad-based ETP approach.

8.2.5 Later in the project the Council employed a specialist team. This had significant benefits in terms of improvement in the depth and breadth of understanding and insight. As a result a number of the initiatives developed during the latter stages were given funding to take them beyond the duration of the DfT funding.

8.2.6 One area of success from the earlier stages in the process was the Young People's Safer Accessibility Project. This was a school-based initiative delivered by the University of the West of England and was in response to early analysis of casualties and the issue of the high number of child casualties.

The Neighbourhood Road Safety Initiative demonstrated that communities can be engaged and initiatives developed that target the very specific needs of that group. The Neighbourhood Road Safety Initiative did use, almost universally, specialists in education, training and publicity to develop and deliver the programme.

8.3 INTERACTION BETWEEN ENGINEERING AND ETP SOLUTIONS

8.3.1 There was very little coordination between the engineering schemes and ETP elements, particularly early on in the process and certainly compared to projects where engineering schemes are essentially developed in collaboration and support of ETP projects. Later on in the process, with a programme of bespoke initiatives being formed, the design team highlighted one particular problem (children leaving the mosque and spilling out on the pavement and roads at certain times), which it felt would be best addressed through ETP albeit with some minor engineering improvements in support.

8.3.2 It should be noted that the whole project team was very quick to realise the potential benefits of involving ETP staff at the earliest opportunity – the research and community engagement approach to developing the ETP projects was a skillset that had been lacking during the consultation phase and the progress made by the ETP team was considerable in a relatively short timescale as a result.

8.4 THE ETP PROGRAMME

Early phase

LESSON LEARNT - The development of ETP schemes takes time and requires an in-depth understanding of how a company ticks. Given these constraints, projects involving ETP should seek to get resource in place as early as possible as there are also consequential benefits where engineering schemes can be developed in combination with ETP to the benefit of both.

8.4.1 With the delays experienced in the project programme, there was a corresponding delay in kick starting the ETP projects. With the emphasis on making up lost time on the consultation and design elements of the project, there was no detailed planning of ETP schemes and there was a further subsequent delay in getting approval to take on a dedicated member of staff to lead the ETP work.

8.4.2 Prior to the specialist ETP member of staff being employed a handful of initiatives were under way, many with support or leads from external bodies. However these were, in the main, extensions of work that had been done elsewhere in the city or a continuation of other programmes in existence. The more specifically targeted schemes, such as the Young People's Safer Accessibility Project, played a dual role as a means of consultation as well as responding to the issue of disproportionately high child casualty rates.

8.4.3 ETP initiatives underway in the early stages of the project included the following:

- **Your choice on the road** – Road safety education delivered to secondary schools throughout the area by the West Midlands Fire Service.

- **Children's traffic club** – This initiative was delivered through local children's centres (part of the Sure Start programme) aimed at creating greater road safety awareness amongst pre-school children.

- **Young people's safer accessibility project** – Delivering workshop days in primary schools throughout the area to understand children's perception of the area and the issues being addressed by the project. Feedback was collated from all areas and fed back to the project team. In essence this was a dual ETP and consultation exercise.

8.4.4 West Midlands Police followed the ETP campaigns with sustained and visible enforcement of traffic regulations within the study area, particularly speeding. This was in response to findings into the impact of road safety based ETP initiatives - their impact tending to be short-term due to the lack of any tangible reinforcement over longer periods.

The Neighbourhood Road Safety Initiative project shows how education, training and publicity can form the majority component of the roads safety /casualty reduction strategy. Results from cities such as Bradford (see chapter 10 for details) show that casualty reduction can be as high as conventional engineering schemes. Education, training and publicity does not have to be merely a supporting tool.

Detailed further development

Despite the wealth of data available the ETP programme was unfocussed until new resource was identified. From that point on ETP was delivered in a more joined up and community-focussed approach to such a degree that it has been continued beyond the life of the ICSDP.

8.4.5 A full-time member of staff started in June 2007 and the original brief was to undertake research on the area with a view to delivering ETP initiatives within one year to coincide with completion of the engineering works. Following several months of detailed research, including a new review of accident data, and making links in the communities, it became clear that the allocated timescales would not allow for anything more than the basic groundwork to be undertaken for planning and development of schemes.

8.4.6 The first major event took place in June 2008, the Community Safety Event, with support from local traders, police, fire service and local schools, and included a marquee set up in a local park with stalls featuring information and displays. This included demonstrations of some of the enforcement equipment in use by the police.

8.4.7 At this stage, some important links had been established into the community, particularly with schools in the area and a bespoke package of road safety programmes had been developed for different age groups and for different communities. In hindsight the Council recognised that some of the links within the community developed through the ETP process would have been extremely beneficial during the early stages in the consultation and engagement process.

8.4.8 With a solid programme of work supported by a clear rationale developed through research and work with schools, mosques and neighbourhood officers, the Council opted to fund ETP projects through LTP funding beyond the March 2009 time limited DfT funding.

8.5 ENHANCED PROJECTS

8.5.1 Projects centred around three core areas:

- **Schools** – Bespoke road safety education programmes with RoSPA and ‘condensed’ Kerbcraft training.
- **Mosques** – Supervision of children through a ‘Steward’ scheme.
- **Parents** – Taking part in school education projects and the child car seat project (engaged through ante-natal classes and at school start /finish times).

School projects

8.5.2 All schools in the project area were visited by the ETP team to deliver road safety education programmes that had been developed according to the different age groups and requirements of the different areas within the project area. A programme was developed with The Royal Society for the Prevention Accidents (RoSPA) for use in the Green Lane area, 'Learning by Doing', taking children out onto the streets and teaching them basic skills to cross the road safely and develop hazard awareness. Schools in the Green Lane area were subject to a concentrated effort as the highest numbers of child casualties were in this area.

LESSON LEARNT – re-visiting schools to assess retention of messages is a quick and easy way of assessing the efficacy of ETP programmes.

> *"You could have all the engineering interventions in the world, but without changes in behaviour, it is not going to change anything. Children see cars ignore the crossings, even when we were out looking at the new crossings wearing high-visibility jackets! This reinforces the message that we have to take responsibility for our own lives. The children looked shocked and were able to recognise the importance of this – so in a way it helps with their education. We were able to get them to think about what they needed to tell their parents."*

> *"We can put in crossing points – but it is up to people to use them. So the link between educational and engineering interventions is crucial."*

8.5.3 Evaluation of the effectiveness of the schemes was an important aspect of the work and an assessment criteria was developed based upon RoSPA's 'stay alive' package with support from the University of the West of England. This assessed knowledge retention by the children through re-visiting schools three months after programmes were delivered. Following overwhelmingly positive results from the assessment, work was rolled out to other areas.

8.5.4 There was also a review of existing road safety education programmes where it was found that a lack of parental engagement made delivery of the Kerbcraft programme difficult. Traditionally run over a 12 week period, it proved difficult to get parents into the school to take part in the programme over a sustained period so the ETP team developed a condensed programme of Kerbcraft training to be delivered through parental coffee mornings.

8.5.5 To facilitate continuation of the schemes at minimal cost, Police Community Support Officers (PCSOs) have received training to enable them to deliver the work in schools in future, helping to maintain the momentum in road safety terms and strengthen community links with the officers locally.

Mosques and other places of worship

8.5.6 The ETP team needed to undertake research before they were able to develop any strategies or projects, particularly establishing the best routes into the community – chiefly the much smaller mosques dotted throughout the area that were not necessarily designated places of worship. There was also existing knowledge of the area with officers working in road safety education, particularly with schools as well as some inroads via the safer routes to school programme.

8.5.7 Again work was concentrated, although not exclusively, in the Green Lane area. In conjunction with Green Lane Mosque, a steward scheme was developed to train people at the mosque to escort children safely on their journey to /from prayer. This was an issue flagged up by the engineering team working in the area that had identified problems with pavement crowding and behavioural issues with large crowds of children leaving the mosque. As a result the steward training programme was augmented by improvements to the highway with pavement widening and installation of guard railing. High visibility jackets and umbrellas were provided by the ETP team for the guides and children.

8.5.8 With training of community members complete, the steward scheme is an on-going, self-sustaining activity that requires no further funding. There are established contacts at the Council should there be any need for advice or support in the future.

The Inner City Safety Demonstration Project successfully adopted some of the projects originally trialled through the Neighbourhood Road Safety Initiative. Working with educational establishments in the community – for example, the local mosque – provides a communication channel not open to the Council directly.

Parents

8.5.9 Parents were the hardest to reach group for the ETP team with a lack of willingness to participate in any school activities and no established mechanisms through which to encourage attendance of events and training. A strategy was developed using the following methods:

- Project staff actively sought out parents at the start and end of the school day when dropping off or collecting children from school;
- teaching assistants volunteered to provide support in doing this in order to demonstrate the schools' support and address the language barrier in place with many parents;
- development of photo books to use as part of the education programme to make materials accessible and easy to understand for both young children and parents for whom language might be an issue; and
- support was given from the Imam at the local mosque who spoke to parents and helped encourage participation.

LESSONS LEARNT – perseverance and the use of a wide variety of communication and engagement channels can deliver effective training to hard to reach groups but requires planning and an understanding of the dynamics of the local area.

8.5.10 With a large proportion of parents successfully engaged, the project team implemented the road safety education programme for parents and children together whilst also expanding work to include projects targeted at parents. This included a programme of child car seat clinics and fitting events that targeted both existing parents through the school work and new parents through workshops with ante-natal groups in the area.

There are some clear parallels with the Neighbourhood Road Safety Initiative work undertaken in Bradford both in terms of the issues, target audience and projects. Bradford also sought to engage parents and tackle issues of in-car safety, running projects to encourage seat belt use and even subsidising the purchase of child car seats for participants in one education programme.

8.5.11 Following the initial phase of raising awareness of the need for different child seats for different age children, both for child-safety and as a legal requirement, a child car seat fitter was brought in to fit seats for the parents. As the project was rolled out, the council officer leading the programme was trained as a fitter for more efficient delivery of the combined education and provision of the service. A car seat height guide was developed for distribution to schools and shops in the area and there is potential for continuation of the scheme following work with the Police and Fire Service.

8.6 LESSONS LEARNED

8.6.1 With ETP being incorporated into the project relatively late in the context of the whole scheme programme, it was felt that a different approach could have been taken for this element of work especially considering the value for money that ETP work offers. This includes the following:

- involvement from the beginning of the project to understand objectives and work together with designers, particularly in development of a project brief;
- giving more emphasis to smaller local projects rather than the area wide improvement ‘Streets Ahead on Safety’ branding that had a general lack of understanding from the public;
- extending the young people’s project to work with parents throughout the area;
- spending longer working with schools to get greater involvement;
- running smaller events in a number different areas in place of the June 2008 road safety fun day;
- enhancing staff resource early on for delivery of the project; and
- providing continued education projects throughout the delivery process for new families coming into the area.

9 The Results

9.1.1 At the time of writing, the project has been substantially complete for 15 months. As such, allowing for a period for processing of accident data, there is only 12 months of post-completion accident data with which to assess the impact of the scheme. This enables us to provide an indicative view of the impact of the scheme but results should be treated with caution and will need to be revisited upon the availability of a full three years' of post-completion accident data.

9.1.2 Furthermore, the ETP element of the project is currently on-going with programmes being delivered by a dedicated project officer up until March 2011. Any impact that this element of work has on the casualty data is not likely to be fully realised on the 12 months of data collated for this report. It is hoped, given the positive impact of ETP initiatives elsewhere, that there is scope for further reductions in casualties in the area.

9.1.3 Assessment of objectives 2-5 comprises of research undertaken by Birmingham University. This is covered more comprehensively, to include methodology and more detailed analysis, by the University's Academic Research Report.

9.2 MEASURING SUCCESS

As this was a demonstration project more sophisticated tools were used but simpler approaches to measuring success would have been applicable.

9.2.1 Criteria for measuring success were established at the outset of the project. Details are provided below on the assessment methodology for each objective.

Objective 1 - To have a measurable impact on road safety in actual and perceived terms

- Full accident data analysis and trend reporting by Birmingham City County using STATS 19 (police accident report) and traffic survey data.

- Feedback from Birmingham University research on perceptions of safety.

Objective 2 - To integrate road safety activity into the regeneration and other agendas and build partnerships for delivery

- Evaluation undertaken by Birmingham University with the use of questionnaires and one-to-one stakeholder interviews as part of a

Partnership Assessment Tool (PAT) to rate the effectiveness of partnership working.

- An evaluation measuring the strategic objectives against outcomes on the ground - understanding what the key aims of partnerships are and testing their impact at grass roots /street level.

Objective 3 - To secure inclusive engagement and participation with a diverse community, and influencing local views about road safety

- Birmingham University to validate success and whether people feel engaged through questionnaires and stakeholder interviews to gauge perceived success.

- Feedback collated from ETP team regarding initiatives undertaken as part of the ICSDP and resulting on-going work.

Objective 4 - To improve accessibility to jobs, services and leisure opportunities

- Mental mapping and perception analysis undertaken by Birmingham University including journey analysis and understanding behaviour both in daylight and at night.

- Accessibility assessed based on origin within the zone and travel behaviour assessed to cover perception of quality, time, cost, reliability and image of transport.

Objective 5 - To improve quality of life; a safer, vibrant, more stable community

- Feedback collated from community surveys and relevant statistics in comparison to baseline data.

9.2.2 Where possible objective targets were set to allow a clear assessment of whether the project had been a success. These are shown below.

Objective	Sub-Objective	Measurement of success
To have a measureable impact on road safety in actual and perceived terms	*General reduction in accidents and accident rates*	• 40% reduction in accidents • Exceed the inner city reductions elsewhere in Birmingham and in other control areas
	Reduction in adult pedestrian and cyclist accidents	• 50% reduction in accidents and a reduction in % KSI • Exceed the inner city reductions elsewhere in Birmingham and in other control areas
	Reduction in child pedestrian and cyclist accidents	• 60% reduction in accidents and a reduction in % KSI • Exceed the inner city reductions elsewhere in Birmingham and in other control areas
	Improved personal security	• 10% increase in pedestrian activity • Improved perception of personal security (target specific “high risk” groups) • Reduced crime • Reduced fear of crime

Objective	Sub-Objective	Measurement of success
To integrate road safety activity into the regeneration and other agendas and build partnerships for delivery	*To build working relationships*	• To develop 5 separate work elements with other bodies • The level of contribution (cash or resource) from other partners in comparison to other schemes in Birmingham) • Assessment of the 'health' of partnership activity using the Partnership Assessment Tool (PAT) • Internal project team interview results
	To understand other initiatives	• As above
To secure inclusive engagement and participation with a diverse community, and influencing local views about road safety	*To seek innovative ways to engage with the community*	• To increase response rate to public consultation from current 5% to 15% • Improve the level of confidence from the local public with regards to consultation and having their views taken into account • Survey of community stakeholders (individuals and groups) using Harmonized Question Set (HQS) for social capital
	To tap into the local knowledge and contacts of the area teams	• As above
To improve accessibility to jobs, services and leisure opportunities	*To improve the reliability of public transport*	• No buses diverting of routes – 10% decrease in journey times
	To improve access to public transport by removing barriers to	• 10% increase in public transport patronage

Objective	Sub-Objective	Measurement of success
	movement	• Increase the level of use for mobility impaired • To improve perception of the quality /security of the service • Increase accessibility to local services through random sample surveys
	To reduce the fear of crime	• 10% increase in pedestrian activity
To improve quality of life; a safer, more vibrant and more stable community	*To improve quality of life; a safer, vibrant, more stable community*	• Engagement in the community • Adding value to other services • Regeneration – Property values – Void spaces – Inward investment • Responses from random sample survey on quality of live issues combined with statistical analysis of base data

9.3 OBJECTIVE 1 – ROAD SAFETY

9.3.1 As set out in the introduction, objective one "to have a measurable impact on road safety in actual and perceived terms" is measured through assessment of STATS 19 accident data and feedback from interview surveys undertaken by Birmingham University.

9.3.2 The data shown compares a three year period (January 2006 to December 2008) prior to implementation with 12 months of data post completion (September 2009 to August 2010). As such the results provide only an indicative view of the scheme's impact upon casualties. A full assessment of the casualty data will be undertaken at three years post completion.

General reduction in casualties and casualty rates

9.3.3 Table 9.1 shows all casualties by severity for the whole project area against the background of city-wide data and the Coventry control site for comparison

Table 9.1: Casualty reduction - full project area

Location	All Casualties (annual average)			
	Before	After	Reduction	Change (%)
Project Area	581	484	97	-16.6%
Birmingham City	5339	4861	478	-9.0%
Coventry (Foleshill Ward)	132	120	12	-9.6%

9.3.4 This analysis indicates that in terms of achieving the aimed-for targets:

- the overall casualty reduction (target 40%) was **NOT ACHIEVED; and**
- the target of out-performing the rest of Birmingham and control centres was **SUCCESSFUL**

Reduction in adult pedestrian and cyclist casualties

Table 9.2: Adult pedestrian /cyclist casualty reduction - full project area

Location	Adult pedestrian /cyclist casualties (annual average)			
	Before	After	Reduction	Change (%)
Project Area	65	58	7	**-10.7**
Birmingham City	750	737	13	**-1.8**
Coventry (Foleshill Ward)	16	16	0	**0%**

*data represents all ages

9.3.5 This analysis indicates that in terms of achieving the aimed-for targets:

- the overall casualty reduction (target 50%) was **NOT ACHIEVED;** and
- the target of out-performing the rest of Birmingham and control centres was **SUCCESSFUL**

Reduction in child pedestrian and cyclist casualties

Table 9.3: *Child pedestrian /cyclist casualty reduction - full project area*

Location	Child pedestrian /cyclist casualties (annual average)			
	Before	After	Reduction	Change (%)
Project Area	64.3	43	21.3	**-33**
Birmingham City	422	302	120	**-28.4**
Coventry* (Foleshill Ward)	16	16	0	**0**

*data represents all ages

9.3.6 This analysis indicates that in terms of achieving the aimed-for targets:

- the overall casualty reduction (target 60%) was **NOT ACHIEVED; and**
- the target of out-performing the rest of Birmingham and control centres was **SUCCESSFUL**

9.3.7 The overall figures are encouraging with a demonstrable increase over the background trend shown by city-wide and control site data, particularly for child casualties. A more significant decrease is shown in the number of people Killed or Seriously Injured (KSI) (Table 9.4). This trend is reflected in child casualties where there is a more significant reduction overall and with KSIs.

Table 9.4: Casualty reduction by severity - full project area

Location	All Casualties (% reduction)			
	Slight	Serious	Fatal	All
Project Area	-15	-35	-75	-16.6
Birmingham City	-9	-4	-19	-9.0
Coventry (Foleshill Ward)	-8	-20	-33	-9.6

Table 9.5: Child casualty reduction by severity - full project area

Location	Child Casualties (% reduction)			
	Slight	Serious	Fatal	Total
Project Area	-24	-58	-100	-30
Birmingham City	-18	-12	+25	-16.8
Coventry (Foleshill Ward)	-9	+80	0	0

Improved personal security

Increase in pedestrian activity

9.3.8 The economic downturn has had an impact in the numbers of people visiting shopping areas where pedestrian activity is monitored. Unfortunately it is not possible to draw any conclusions with regards to levels of activity before and after the completion of the scheme as robust analysis would require data for benchmarking purposes which is not available for comparison.

Perception on crossing the road and safety in the area

9.3.9 In April 2008, 47% of respondents felt that all parts of the area were pretty safe walking around. On the contrary, around 21% of interviewees reported that they would avoid the Alum Rock Road due to a general feeling of “insecurity”, the presence of gangs of youth, the multi-ethnic nature of the area or the presence of traffic congestion. In September 2009, a higher proportion of respondents (58%) felt that all parts of the area were pretty safe walking around. Only 11% of interviewees reported that they would avoid the Alum Rock Road.

9.3.10 The feeling of “insecurity” in terms of crossing the road and walking alone decreased significantly in the ICSDP area overall from April 2008 to September 2009 (see Table 9.6). This overall positive change was also expressed in the proportion of respondents who would allow a 10 year old to walk to school alone from their home, which increased from 22% in April 2008 to 35% in September 2009. While this reflects an improvement in most parts of the ICSDP area, this was not the case in Ward End.

Table 9.6: Changes in perceived safety from April 2008 to Sept. 2009

Proportion of interviewees in the ICSDP area who	Apr-08	Sep-09	Variation 2008-09
1) felt that it was a bit or very unsafe…			
To cross the road where they were interviewed.	50%	43%	-13%
To walk alone during the day in the area where they were interviewed.	26%	17%	-36%
To walk alone after dark in the area where they were interviewed.	73%	66%	-10%
2) rate the area as problematic or very problematic…			
For generally getting around.	10%	3%	-66%*
For walking to the local shops.	4 %	4%	-21%*
For walking from home to the bus stop.	4%	4%	-12%*
For walking for people with buggies, wheelchair users and other disabilities.	17%	8%	-54%
3) would allow a 10 year old to walk to school alone from their home			
	22%	35%	59%
4) think that the following is fairly or very big problem in the neighbourhood			
The amount of road traffic	88%	61%	-31%
The speed of road traffic	82%	51%	-37%
Parking in residential areas	68%	54%	-21%
The conditions of the roads and footways	55%	24%	-56%

*Source: CURS (Centre for Urban and Regional Studies) surveys by Birmingham University. Note: * Given the small scale of the original response, this variation should be considered with caution.*
Figures have been rounded and so % changes may not appear accurate

9.3.11 The findings from the on-street survey show an overall improvement of the liveability of the ICSDP area in traffic and safety terms from April 2008 to September 2009. These findings will have to be compared with actual road safety changes in the area as well as overall trends in the city over the same period. Indeed, a Birmingham opinion survey undertaken in 2009 also found an overall improvement on wider safety and quality of public transport indicators compared with 2008 in the city. Nevertheless, due to the scale of some of the changes observed, it would be reasonable to think that the sum of the extent of the positive changes observed in our surveys could be linked with the ICSDP project.

9.3.12 It can be concluded the objective to improve perception of personal security has been **SUCCESSFUL**.

Reduced crime

9.3.13 Crime statistics for the area show a year on year reduction in overall crime. However this largely corresponds to the city-wide trend that also shows a continued reduction. Table 9.7 shows the trend within the project area. It should be noted that there has been a change in how crime data is recorded, with slightly different area boundaries used to represent the before and after periods. This still reflects the overall downward trend indicated.

Table 9.7: Crime Statistics – Before and after comparison

Year	2002	2003	2004	2007	2008	2009
Recorded crime	11845	11159	9857	8397	7337	7065

Reduced fear of crime

9.3.14 Table 9.6 shows that in overall terms, interview responses across the project area show a reduced fear of crime. The impact does vary according to the different areas in which interviews were undertaken, however the majority show an improvement with only the Heartlands Hospital area recording some increase in the fear of crime.

9.4 OBJECTIVE 1 - CONCLUSION

9.4.1 When compared with the targets set at the outset of the project, the impact of the scheme in road safety terms has not been as successful as hoped. This does reflect to some degree the ambitions of the project team at the outset. Very few demonstration project schemes have delivered an overall reduction in casualties of 40% or more, and similarly the 60% reduction in child casualties was an extremely challenging target.

9.4.2 The success of the scheme is more apparent when considering casualty severity, particularly in child casualties where the reduction in the numbers of people killed or seriously injured is quite significant. Furthermore, in a more traditional economic assessment of road safety, the first year rate of return of at 105.9% (see 9.13), is encouraging considering the budget and scheme area involved.

9.4.3 Finally, the results regarding perceptions of safety are encouraging, and in terms of fear of crime, the improvements to streetscape appear to have had an impact.

9.5 OBJECTIVE 2 – PARTNERSHIP WORKING

9.5.1 This objective sought to test how well the project integrates road safety activity into the regeneration and other agendas and build partnerships for delivery. This objective was assessed through on-going monitoring of project activities and a mix of surveys and interviews with key partners in the project at two points in time: pre-intervention T1 (autumn 2007) and post-intervention T2 (autumn 2009). The survey used the Partnership Assessment Tool (PAT) with a sample of project staff and additional stakeholders identified by the project management team. The PAT summarises achievement against six principles of partnership:

- recognise and accept the NEED for partnership;
- develop clarity and realism of PURPOSE;
- ensure COMMITMENT and ownership;
- develop and maintain TRUST;
- create clear and ROBUST partnership arrangements; and
- MONITOR, measure and learn.

9.5.2 Respondents were additionally interviewed by the evaluation team in order to explore experiences and lessons learned in more qualitative detail, using a semi-structured interview schedule.

Develop 5 separate work elements with other bodies

9.5.3 Achieving this was always going to be a challenge for the Council as only at the start of the project did it begin to reach out to other organisations. Cross-organisational working was delivered on the project, namely:

- worked with a major retailer as part of the delivering a road safety awareness community event;

- developed joint working with the police as part of enforcement and awareness raising on Alum Rock Road;
- engaged local mosques in delivering road safety training;
- worked with local PCSOs in delivering ETP projects; and
- targeted parents to deliver education projects in partnership with schools throughout the area.

9.5.4 It can be concluded that the objective to deliver work with other bodies has been **SUCCESSFUL**.

Contribution from other parties

9.5.5 This was a disappointing area of the project with little in the way of delivery. This was in many ways due to the elastic timescales to which the project was ultimately delivered, making it difficult to secure other contributions.

9.5.6 Financial input to the project out with DfT and the Council was minimal. Resource input was more marked – specifically the police input to speed management. However, this was primarily the result of a fortuitous convergence of plans rather than something specifically generated by the project.

9.5.7 It can be concluded that the objective to secure contributions from other parties was **NOT ACHIEVED**.

Partnership activity and internal project team working

9.5.8 Overall, ICSDP proved to be extremely challenging for BCC with complex and changing project management systems, partnership arrangements and many attempts to engage local populations in its work, which all influenced the design of the engineering and educational interventions.

Survey [PAT]

9.5.9 Partnership activity was assessed through completion of the Nuffield Partnership Assessment Tool (PAT), a widely-used standardised instrument (See Academic Research Report, University of Birmingham Appendix 2) summarising perceptions of partnership working. This gave respondents the opportunity to discuss issues arising with elements of partnership working described in the PAT and wider literature relating to the ICSDP project.

9.5.10 Overall, of six PAT principles only 'need' and 'purpose' were indicated as positive. ICSDP project managers scored all six principles lower than staff associated closely with the ETP activities, indicating more positive perceptions within the ETP project team. This clearly indicates difficulties with the formation and development of partnerships, upon which broader benefits of the project depend.

Semi-structured interviews

9.5.11 The project was built on the assumption that the engagement of local communities would lead to a wide range of benefits beyond the typical casualty reduction outcomes of traffic schemes, and initially engagement was planned around a steering group with wide membership from a range of community groups. Unfortunately, the steering group initiative stalled at an early stage, and the anticipated involvement from stakeholders did not materialise. The project engineers tried hard to address this through a wide range of consultation approaches but the absence of specialist community development support led to difficulties.

9.5.12 Project governance arrangements were complex and multi-level and, crucially, lacked a clear mechanism for resolving the conflicts between different priorities. This created difficulties when considering the wide and divergent views and objectives of some of the stakeholder groups.

9.5.13 There was a high turnover of staff so that there was very little 'organisational memory' for the project. With some of the managers and most of the broader partnership forums located remote from officers it proved difficult to embed partnership working through the wider project team. The situation was significantly improved once the Council's Neighbourhood Management System was in place but this came a little late for the project to really benefit.

9.5.14 Additionally, partnership working was made more challenging by fluid project time-lines, which made it difficult to find matched funding from other departments, such as regeneration.

Conclusions /learning

9.5.15 The Council's neighbourhood management system may have helped foster community engagement, but unfortunately it was introduced at a late stage of the project's development and so was not available to support community engagement in the early phases. Such local strategic partnerships provide a more robust basis for democratic community engagement.

9.5.16 The governance and management structures employed on projects such as this have a significant bearing on the outcomes and quality of delivery. Consideration should be given to the key roles and responsibilities and the links required both internally within the Council and with partner bodies. The management structures should then be set up to positively support these relationships.

9.5.17 As a vital ingredient to encourage behavioural change associated with engineering interventions, education strategies should be locally based in response to issues and draw on the active involvement of children to engage adults.

9.5.18 Overall we can conclude that the objective to build good cross-organisational working relationships was **NOT ACHIEVED.**

9.6 OBJECTIVE 2 - CONCLUSION

9.6.1 Whilst the establishment of cross-organisational working relationships was to prove difficult from the start of the project, it is more telling to draw conclusions based upon the changes over the life of the project. For example, many of the established partnerships were developed later on in the project by the ETP team. At this later stage, organisational change at the Council had resulted in improved local connections through the neighbourhood management system, and the project team was very quick in learning the lessons from these earlier problems. As a result, policy and practise with regards to partnership working and community engagement within the Council was itself developing in response to these lessons whilst the project was still being delivered.

9.7 OBJECTIVE 3 - EFFECTIVE ENGAGEMENT

9.7.1 The detailed aim of this objective was to secure inclusive engagement and participation with a diverse community, and to influence local views about road safety.

Evaluation methods

9.7.2 Assessment of this objective was through document analysis, interviews and focus groups. Our evaluation used the InterAct model of "Evaluating Participatory, deliberative and cooperative ways of working as analytical framework." This model highlights the importance of considering both the consultation process itself and the impacts of that process (InterAct (2001)) looking at the objectives, the context, the consultation methods, the inclusiveness of the consultation process, the outputs and the outcomes.

To seek innovative ways to engage the community

Increasing response rate to public consultation from the current 5% to 15%

9.7.3 This objective clearly indicates that there was a long-standing poor level of performance in engaging communities in the area.

9.7.4 The level of responses for the various consultations is summarised in Table 9.8.

Table 9.8: Consultation Activities and Response

Activity	Date	Area	Number invited	Number of participants
Phase 1	July 2004	Whole area	350	284
Local Accessibility participation	June/July 2005	Whole area	-	40-50
Four engineering schemes	Sept/Oct 2005	Schemes areas	Questionnaire (13,000 households) Public Exhibitions Design panels /steering groups (50 invited to each)	(800 returns) 55 (approx. 10 at each)
Young People's Safer Accessibility Project	Sept 2005 & June 2006	Whole area	Four schools to participate	Approx. 300 pupils
Hodge Hill Transport Review	June/July 2005	Shard End & Hodge Hill Wards	-	63
EBNS MAP*	Jan/Feb 2006	Whole area	-	193 interviews 64 stakeholders

**East Birmingham & North Solihull regeneration zone stakeholder map*

Improve the level of confidence from the local public that their views will be taken into account following consultation

9.7.5 A key aspect of the project was to improve the local community's ability to influence decisions and to believe that they are able to work together to deliver change. Table 9.9 below shows the results of this assessment. The results are from random street surveys in the area undertaken prior to final decisions on schemes and construction commencing and after the substantial completion of the works.

Table 9.9: Community ability to influence decisions

Statement	Percentage of respondents agreeing with the statement	
	Survey 1 April 2008	Survey 2 Sept. 2009
I can influence decisions affecting my local area	18%	16%
By working together, people in my area can influence decisions that affect the local area	29%	40%

9.7.6 There is clearly only a small proportion (and slight shrinking) of the population believes that they can influence decisions. However, there is a larger and growing perception that by working together, a greater influence on decision making can be achieved.

9.7.7 Overall we can conclude that improving confidence in the local ability to influence decisions was **NOT ACHIEVED.**

Social capital

9.7.8 Another goal of the project was to improve social capital, i.e. the cohesiveness of a community to act in the best interests of the many, to support those who need supporting and to own and deliver change. This is closely aligned with some of the concepts of the Big Society being espoused by central government.

9.7.9 In the on-street survey respondents were asked to consider a number of statements and whether they agreed or disagreed with them. The questions sought to investigate changing perceptions about joint working, trust and the integration of individuals from different backgrounds. The results are shown below:

Table 9.10: Social capital within the ICSDP area

Statement	Percentage of respondents agreeing with the statement	
	Survey 1 April 2008	Survey 2 Sept. 2009
My neighbourhood is a place where people do things together and try to help each other	49%	66%
Most people in my neighbourhood can be trusted	55%	67%
My neighbourhood is a place where people from different backgrounds get on well together	40%	53%

9.7.10 In contrast to the previous response there was a significant and consistent move towards improved social capital on all measures.

9.7.11 Overall we can conclude that the objective improve confidence in local ability to influence decisions was **SUCCESSFUL.**

Survey of community stakeholders

9.7.12 The University team had intended to support their on-street interview work with interviews with community stakeholders. However, despite being given a number of contacts by the Council, it proved extremely difficult to get individuals to agree to participate. As a result, there was not a sufficient level of feedback from stakeholders to reliably present their views for comparison to public feedback.

9.8 OBJECTIVE 3 - CONCLUSION

Results and analysis

9.8.1 The results are somewhat mixed, reflecting to a large extent the challenging nature of the original aims and objectives. The management team had a clear understanding of these objectives and a lot of effort was put into disseminating them to all stakeholders through a variety of means (action plan, newsletter, road show, and activities with schools) in order to get residents' inputs. However, some difficulties were encountered in engaging people and it is unclear to what extent the implemented solutions reflect the aspirations of the entire community.

9.8.2 Nevertheless, the results from the survey in the previous section show that perceptions on road safety and social capital in the area have improved. The education and training initiatives were also successful in influencing local views about road safety, notably the youth project.

9.8.3 Due to the difficulties encountered by the project in terms of community engagement, outcomes are more difficult to pinpoint. While the overall objective of the project was to achieve the equivalent of level 6 – partnership on the Arnstein ladder of participation, the outcome can be characterised more as level 5 – involvement.

9.8.4 While peoples' views had an influence on the decisions that were made, they had to accommodate local political views on the types of road safety measures that should be used. Nevertheless, the management team tried to accommodate some of these requests. This became a pre-requisite for scheme implementation. For example, it was possible to create new parking spaces in the Alum Rock Road scheme and this scheme is widely accepted by the community to have been a success, having addressed a broader spectrum of locally stated needs.

Conclusions /learning

9.8.5 The ICSDP project was aspirational in terms of the approach and objectives and staff demonstrated strong commitment, enthusiasm and flexibility to overcome difficulties. They tried to consult as many people as possible as required by the wider objectives of the project. Nevertheless, this was rendered difficult by the shortage of skilled staff involved in the consultation process.

9.9 OBJECTIVE 4: TO IMPROVE ACCESSIBILITY

9.9.1 This objective is targeted at assessing improvements in accessibility to jobs, services and leisure opportunities.

Evaluation methods

9.9.2 This objective was assessed by comparing findings from the two on-street surveys with users, looking at changes in their travel patterns and in any difficulty they had encountered in their daily travels. It also uses readily available data from the Council's own monitoring activities.

To improve the reliability of public transport

9.9.3 This was measured through determining whether public transport services were more reliable in terms of journey times within the area. Unfortunately economic conditions have rendered the measurement of this aspect redundant. Across Birmingham city there has been a reduction of nearly 10% in traffic volumes over recent years with consequential impacts on delays. As congestion is highly localised it is not practical to isolate the effects of the scheme from the wider area and this measure has been dropped from the evaluation.

9.9.4 Prior to work on the project beginning, one bus service had been diverted from Alum Rock Road due to delays incurred on the route. The original route for this service has since been reinstated following improvements to journey times on the route.

To improve access to public transport by removing barriers to movement

9.9.5 This is measured through levels of use by all users and by the mobility impaired as well as improvements in perception.

Increase in patronage

9.9.6 Public transport patronage is traditionally measured in terms of passenger volumes of particular services or routes. However, for a project such as this the key consideration is how many people who use the area (for example residents or those using the area for shopping or work) are using different modes of travel.

9.9.7 On-street surveys captured this information for a random sample of users (circa 350-400 for both the before and after surveys). Some of the key statistics are shown below:

Table 9.11 – Change in journey mode between 2008 and 2009

Transport mode (% of respondents journey modes)	Year		% change
	2008	2009	
Car driver	14.7	22.7	54
Car passenger	4.8	5.0	4
Motorbike	0.2	0.0	-100
Train/metro	0.0	0.4	-
Bus	22.7	19.5	-14
Taxi	0.8	1.6	100
Walk	56.7	50.2	-11
Other	0.2	0.6	300

9.9.8 This simple analysis indicates an overall reduction in the level of bus use declining, as does pedestrian activity. The main increase is in the use of the car, with an increase of more than 50% within the year.

9.9.9 For comparison, city-wide data shows a declining trend in bus usage in the long term (with negligible impact on the above years) with the proportion of car journeys remaining fairly static.

9.9.10 The changes may also reflect a change in the use of the area between 2008 and 2009, with leisure use increasing between the two years (see Table 9.12 below). Leisure trips have a higher car mode split than other modes in the national travel survey and so could well impact on the overall modal split.

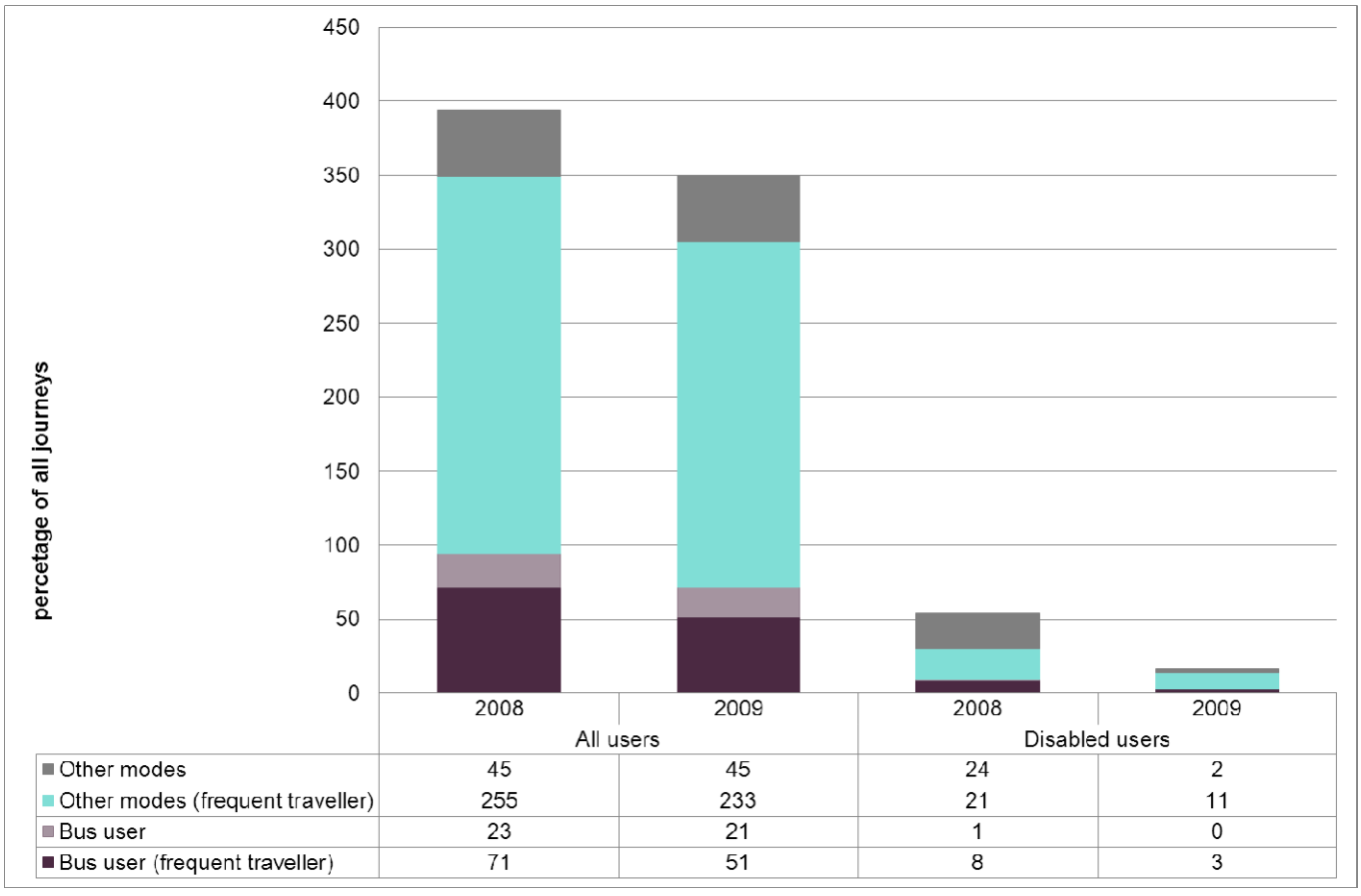
9.9.11 Overall we can conclude that the aim of increasing patronage has **NOT BEEN ACHIEVED.**

Increase in patronage by the mobility impaired

9.9.12 The on-street surveys recorded details of those who had disabilities of some nature (mobility impairment or otherwise). Total responses were low with only 34 indicating they were disabled in some way in the 2008 surveys and 18 in the 2009 surveys. The analysis below therefore looks at total numbers of disabled rather than those reporting mobility impairment.

9.9.13 The responses were analysed to look at the numbers of public transport users in 2008 and 2009. The responses were split to separate those who reported travelling frequently (at least once a week) from those who travelled less frequently. Figure 9.1 below shows the results.

Figure 9.1: Public transport user survey



	All users 2008	All users 2009	Disabled users 2008	Disabled users 2009
Other modes	45	45	24	2
Other modes (frequent traveller)	255	233	21	11
Bus user	23	21	1	0
Bus user (frequent traveller)	71	51	8	3

9.9.14 Based on the survey, numbers of public transport users have declined overall and particularly in terms of disabled users. However, with survey levels being extremely low it is considered that no robust conclusion can be reached on this issue.

Improved perception of the quality /security of services

9.9.15 Using public transport usually means that the traveller must access the service at the start of their journey and make the final leg of their journey on foot. The journey on public transport is usually relatively controlled and secure in comparison to the street and so issues of security have been addressed through questions asking individuals in the area how easy and secure it was to move around the area during the day and at night time.

Table 9.12 – Changes in perception of safety 2008 and 2009

Interviewees considered it was either a little or very unsafe…	**Survey area**					
	Coventry Road	**Bordesley Green**	**Ward End**	**Alum Rock**	**Heartland Hospital**	**ICSDP**
	2008					
To cross the road where they were interviewed.	58%	53%	34%	64%	22%	50%
To walk alone during the day in the area where they were interviewed.	37%	24%	11%	31%	44%	26%
To walk alone after dark in the area where they were interviewed.	72%	79%	68%	70%	93%	73%
	Change 2008 - 2009					
To cross the road where they were interviewed.	-13%	-19%	**19%**	-14%	-17%	-6%
To walk alone during the day in the area where they were interviewed.	-11%	-7%	-3%	-14%	-39%	-10%
To walk alone after dark in the area where they were interviewed.	-10%	-13%	**7%**	-12%	-25%	-7%

9.9.16 In nearly all cases across all of the project areas there was a marked reduction in the proportion of people believing that the activities in question were unsafe or very unsafe. The sole exception to this is Ward End where there was a significant worsening of the perception of safety for which there is no obvious explanation.

9.9.17 Overall we can conclude that the aim of improving security has been **SUCCESSFUL.**

Accessibility to local services

9.9.18 A series of questions were asked in the on-street surveys designed to understand issues of accessibility in terms of ease of movement. Table 9.13 below summarises the results:

Table 9.13 – Changes in perception ease of movement, 2008 and 2009

Interviewees considered it was problematic…	Survey area					
	Coventry Road	Bordesley Green	Ward End	Alum Rock	Heartland Hospital	ICSDP
	2008					
For generally getting around.	21%	12%	1%	8%	0%	10%
For walking to the local shops.	11%	6%	0%	2%	0%	4%
For walking from home to the bus stop.	12%	2%	1%	1%	0%	4%
For walking for people with buggies, wheelchair users and other disabilities.	29%	27%	6%	9%	0%	17%
	Change 2008 - 2009					
For generally getting around.	-11%	-12%	**1%**	-7%	0%	-6%
For walking to the local shops.	0%	-6%	**1%**	-1%	**5%**	-1%
For walking from home to the bus stop.	-1%	-2%	0%	0%	**5%**	-1%
For walking for people with buggies, wheelchair users and other disabilities.	-10%	-27%	**1%**	-7%	**6%**	-9%

9.9.19 Results are not as clear cut here with both the Ward End and Heartlands Hospital areas results worsening rather than improving. Heartlands Hospital is particularly interesting as it showed the greatest improvement in perceptions of security and yet is least effective in terms of ease of movement. This may be due to the much wider catchment area for visitors to the hospital meaning that fewer interviewees are familiar with the area, leading to a wider variety of responses. Overall the most marked improvements are related to ease of movement for mobility impaired in most areas.

9.9.20 Overall we can conclude that the aim of improving access to local services has been **SUCCESSFUL.**

To reduce the fear of crime

9.9.21 At the start of the project access to crime figures was difficult and hence a proxy was identified – pedestrian activity. It was considered that a 10% increase in pedestrian activity on the routes treated was a reasonable proxy, combined with questions asked during the on-street interviews.

9.9.22 The Council undertook a range of pedestrian surveys during the development of the schemes and after implementation and these allow for in-depth analysis of the results.

9.9.23 From earlier analysis (see Table 9.11) surveys of a random selection of people on the street indicate that there was a reduction of 11% in the share of journeys being made to the area on foot.

9.9.24 In addition, crime and anti-social behaviour data has become more readily available through a variety of bodies. Unfortunately the data provided has gone through a series of redefinitions over the last few years and, as a result, it is not possible to undertake a like-for-like assessment over time.

9.10 OBJECTIVE 4 - CONCLUSION

9.10.1 Overall it would seem as though the interventions have had a positive impact on the perception of the area and its actual use in terms of pedestrian activity.

9.11 OBJECTIVE 5: TO IMPROVE QUALITY OF LIFE

9.11.1 The full description of this objective is “to improve quality of life; a safer, vibrant, more stable community.”

Evaluation methods

9.11.2 This objective was assessed by comparing results from the two on-street surveys with residents by looking at changes in their perception in terms of the importance of specific issues in the area as well as the degree of social capital using standard questions.

Results and analysis

9.11.3 Around 70% of the respondents stated that they lived in the ICSDP area in both surveys. Around two thirds of them had lived there for more than 10 years. It is therefore reasonable to conclude that the responses being made reflect a genuine appreciation of the area rather than a knee jerk reaction from a recent arrival to the area.

Engagement in the community

9.11.4 Tables 9.14 and Figure 9.2 show that social capital measures indicate a significant upward trend. The only exception to this is when asked whether they agreed with the statement “*By working together, people in my area can influence decisions that affect the local area*”. In this case there was a reduction from 18% to 16%.

9.11.5 The overall positive trend indicates that the initiative has been **SUCCESSFUL** however it is worth noting that, in comparison to the wider Birmingham context, the number of positive response are still relatively low. This is shown below, comparing the study area results with the results of the 2009 survey across the whole of the city:

Table 9.14: Changes in perception of social capital

% of respondents who agreed with the statement	ICSDP area		Birmingham
	2008	2009	2009
My neighbourhood is a place where people do things together and try to help each other	49%	66%	n/a
Most people in my neighbourhood can be trusted	55%	67%	79%
My neighbourhood is a place where people from different backgrounds get on well together	40%	53%	55%
I can influence decisions affecting my local area	18%	16%	43%
By working together, people in my area can influence decisions that affect the local area	29%	40%	65%

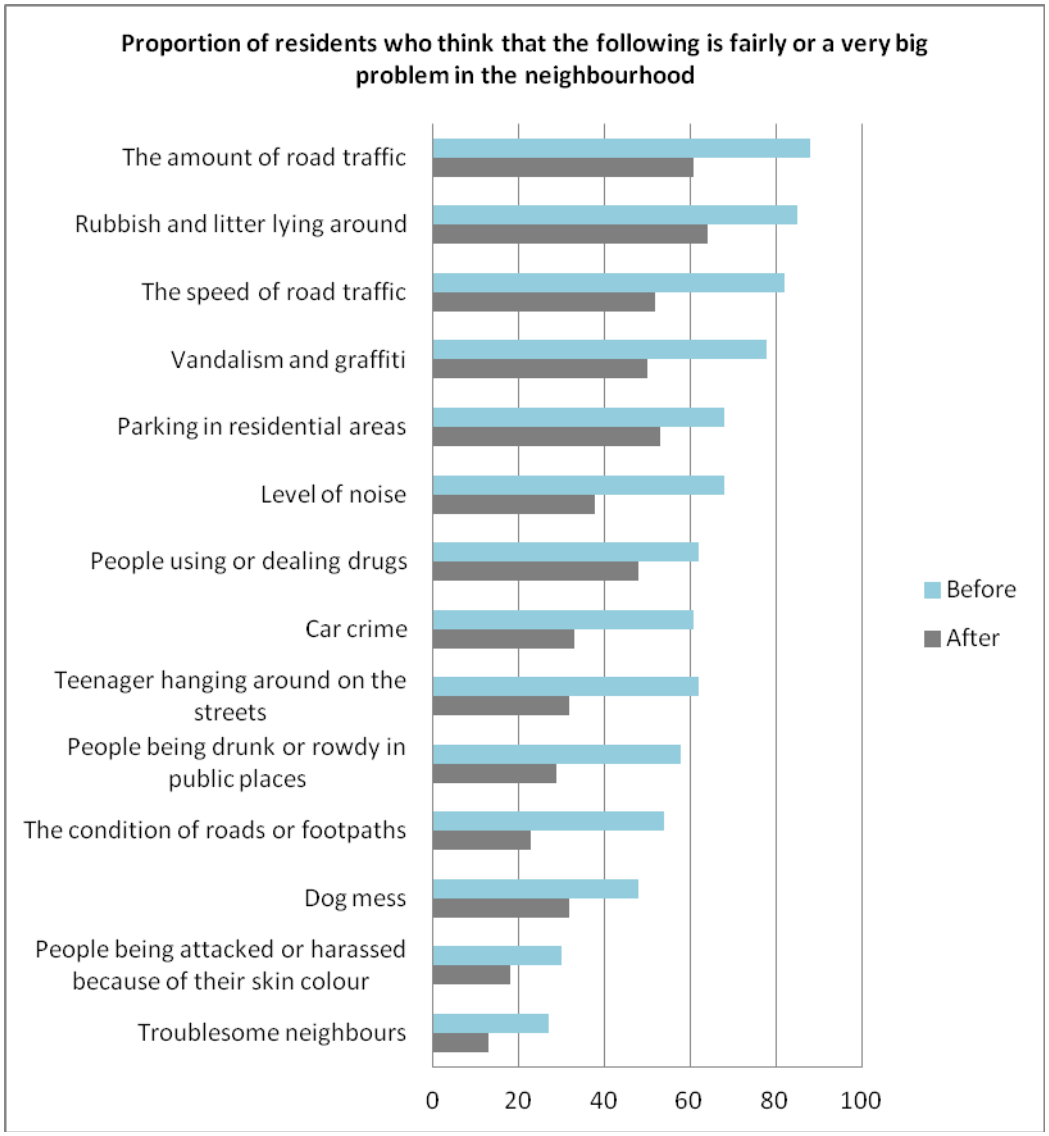
Adding value to other services

9.11.6 It was hoped at the start of the project that there would be consequential benefits arising from the project in terms of real or perceived improvements in a range of other issues associated with quality of life in the area.

9.11.7 This was assessed by looking at the perception of a broad range of problems within the area. The results are shown In Figure 9.2 below. Findings from the surveys showed that higher proportions of residents felt that issues such as rubbish and litter, vandalism and graffiti, teenagers hanging around, etc. were considered to be problems in 2008 and every area of concern reduced in significance by 2009.

9.11.8 Around 66% of residents declared being satisfied with the ICSDP area in April 2008. This proportion increased to 72% in September 2009. While improving, these proportions were still lower than the average for Birmingham - 86% of Birmingham residents indicated that they were satisfied overall with their local area in 2008 (BMG, 2009).

Figure 9.2: Perception of Neighbourhood Problems



9.11.9 Whilst it is difficult to determine whether the whole of the improvement in perception is related directly to the ICSDP interventions this was the single major intervention in the area during this time. It is therefore concluded that this objective was **SUCCESSFUL**.

Adding value to other services

9.11.10 The regenerative impacts of highway works and urban realm in particular are difficult to measure. The most comprehensive study by the Commission for Architecture and the Built Environment (Paved with gold, the real value of street design, 2007) indicates a range of benefits, namely: increases in residential values; increases in rental values and; a declared willingness to pay for improved urban realm by pedestrians.

9.12 OBJECTIVE 5 - CONCLUSIONS

9.12.1 Overall, the surveys show an improvement in terms of quality of life and social capital in the ICSDP area from April 2008 to September 2009. Nevertheless, the area still scores lower than the rest of the city in this regard and the wider Birmingham opinion survey undertaken in 2009 also found an overall improvement in quality of life and social capital indicators compared with previous years. Due to the scale of some of the changes observed, it would be reasonable to conclude that some of the extent of the positive changes observed in our surveys could be linked with the ICSDP project.

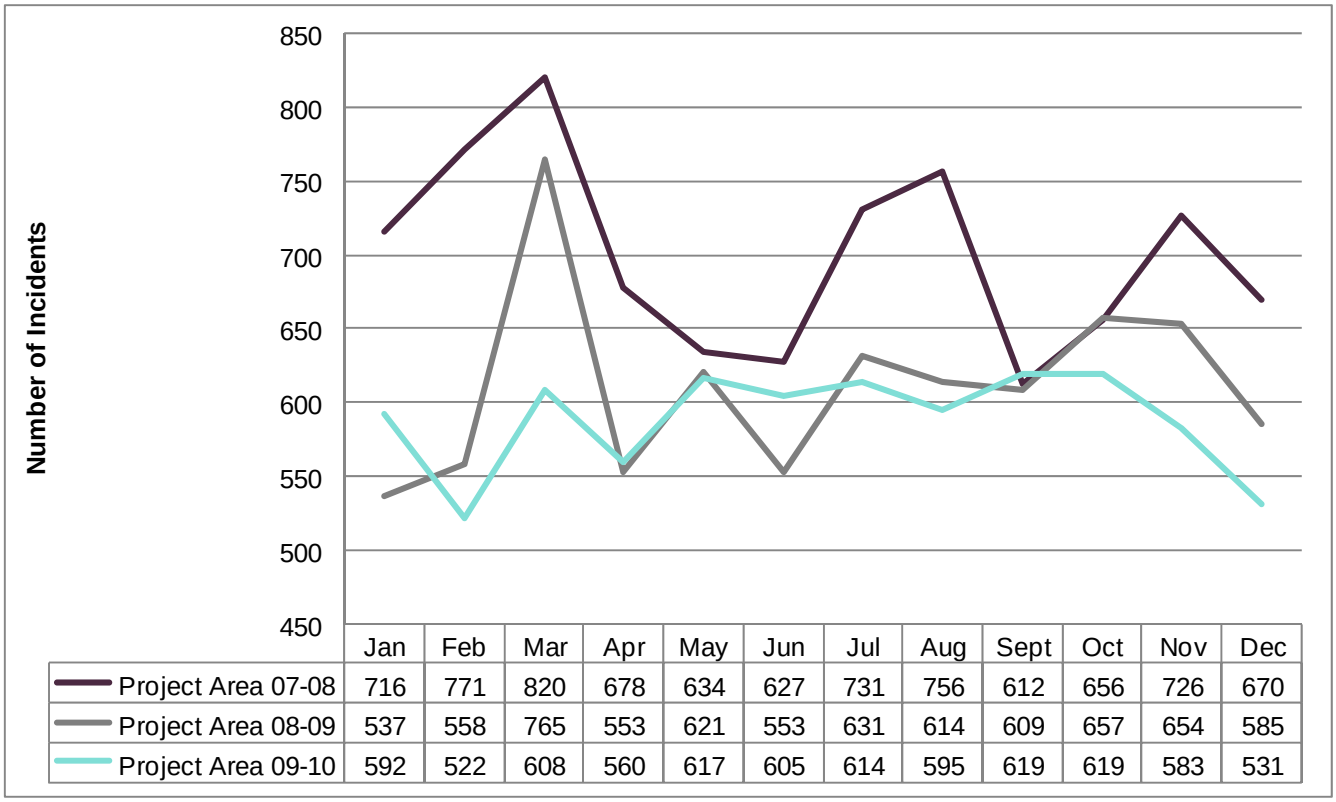
9.13 ADDITIONAL FINDINGS

Crime and anti-social behaviour

9.13.1 Limited data is presented relating to anti-social behaviour due to changes in both the way anti-social behaviour figures are recorded and a change in responsibilities for data management. In comparison crime data is available for the area and this shows a clear and marked drop in crime levels since 2007/08.

9.13.2 This is reflected in the city-wide trend which shows a similar pattern of decline, albeit in variable degrees according to calendar month, in the number of reported incidents over the same period.

Figure 9.3: Project area crime statistics 2007 - 2010



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Project Area 07-08	716	771	820	678	634	627	731	756	612	656	726	670
Project Area 08-09	537	558	765	553	621	553	631	614	609	657	654	585
Project Area 09-10	592	522	608	560	617	605	614	595	619	619	583	531

Additional casualty analysis

9.13.3 There is further insight into the casualty reductions from classified casualty data. However it should be noted that a slightly different 'after' period was used (January to December 2009) that incorporates the final stages of construction work, as no detailed analysis had been undertaken for the more up to date 12 month after period.

Table 9.15: Classified casualty data

Classification	Before (annual average)	After (2009)	% Reduction
Pedestrian	115	90	-22
Pedal Cycle	15	12	-18
Motorcycle <125cc	10	6	-42
Motorcycle >125cc	8	9	8
Taxi/Private hire	18	11	-40
Car	385	347	-10
Bus/Coach (incl Minibus)	15	19	24
Goods vehicle <3.5t	10	9	-7
Goods vehicle <7.5t	1	0	-100
Goods vehicle >7.5t	2	0	-100
Other	2	1	-50

First Year Rate of Return (FYRR) on casualty reduction

9.13.4 A key part of the assessment in road safety terms, the first year rate of return places a monetary value on casualty reduction to put the investment in the scheme into perspective. Only one year's worth of casualty data was available at the time of writing. Of the reduction in casualties three were fatalities. Due to the short time scale for evaluation if was considered prudent to combine fatal and serious injury accidents as one. This has the result circa £4m of benefit from the FYRR calculation.

9.13.5 The results of the evaluation indicate that from a conventional assessment perspective the scheme would be unlikely to rank highly amongst casualty reduction projects. However:

- This represents a limited evaluation as monetary values cannot be ascribed to the achievement of a number of the other objectives of the scheme.

- The KSI-based evaluation appears to under-estimate values.

9.13.6 Once a full three years of post-implementation data is available the true benefits will be more readily identified.

Table 9.16: First Year Rate of Return analysis

Casualty Classification	Killed and seriously injured Serious	Slight	Total
First year casualty reduction (number of casualties fewer than 'before' annual average)	-18	-78.7	
Accident cost* £000s	260**	13.7	
Cost saving £000s	4680	1,080	**5,760**
First Year Rate of Return			
Scheme cost (£000s)			7,240
FYRR			**80%**
FYRR (adjusted)**			**70%**

** Reported Road Casualties Great Britain: 2009*

*** a weighted average figure for KSIs using 2009 severity mix for built-up roads and 2009 valuations was calculated.*

**** Adjusted to reflect findings from DfT Road Safety Research Report No. 108. Factor of 0.88 applied to reflect national reduction in casualty numbers.*

9.14 CONCLUSIONS

9.14.1 The evaluation of the project has shown that the project has faced a variety of challenges due to its novelty, its scope and its context of implementation. In addition, the project covered a very wide area with a variety of sub-areas with very diverse road safety, demographic and socio-economic profiles. This diversity means that the project had to accommodate a variety of needs and ways of participating in local decisions across the sub-areas.

9.14.2 It was difficult to manage residents' expectations as the project was seen as a solution to almost all issues in the area when in fact the main solutions envisaged were limited to road safety schemes and the budget was only £6 million. There seems to have been a mismatch between the wider objectives of the projects and the means to achieve them.

9.14.3 The project aimed to bring together representatives of the various areas using a partnership approach. This was a challenge as this way of working was only starting to be implemented in the city at the time. Consequently, the project did not benefit from existing relationships and processes, although these have since developed during the implementation of the project.

10 Cost Effective Delivery of Casualty Reduction

10.1 CONTEXT

10.1.1 The UK has been very successful in recent years in significantly reducing casualties on the nation's road network. This has been led by engineering interventions tackling cluster sites and problem areas identified through data analysis – i.e. specific locations with an easily identifiable accident problem. With First Year Rate of Return (FYRR) for many types of interventions of up to 300%, justification for the investment was overwhelmingly strong. Furthermore, a strong evidence base was established in terms of what kind of return could be expected from different schemes from basic traffic calming to mini-roundabouts and enforcement cameras.

10.1.2 Following years of investment in this manner, fewer and fewer sites are highlighted during accident analysis for any 'quick win' interventions and road safety engineers began to question how to tackle more challenging environments. This led to the DfT's investment in road safety demonstration projects in order to provide further insight. It is now becoming clear that the rates of returns on road safety schemes are likely to be much lower in future and achieving casualty reductions will become more challenging, particularly over larger areas such as those addressed as part of demonstration projects. Furthermore, the evidence base on which to decide on an approach to these types of projects is not yet developed.

10.1.3 This chapter compares and contrasts the different approaches in order to ascertain the 'next stage' in cost effective delivery casualty reduction:

- impact of the area-wide approach to road safety;
- comparative effectiveness of Education, Training and Publicity and engineering driven schemes; and
- cost effective delivery of route based road safety schemes.

10.2 ENGINEERING AND ETP – COMPARISONS WITH BRADFORD

10.2.1 Bradford implemented a number of projects through the Neighbourhood Road Safety Initiative for which the budget totalled just over £1m. Further details of the broader scheme can be found at www.nrsi.org.uk and reports on the road safety section (demonstration and partnership projects) of the DfT website.

10.2.2 The approach to tackling issues in Bradford, which were broadly similar to those in East Birmingham, was to some degree the exact opposite to that of Birmingham with regards to the balance of engineering and ETP interventions. This was something of a radical approach at the time with an extensive consultation exercise and initial development of ETP schemes largely preceding development of engineering works. Rationale for the engineering schemes came from a more detailed understanding of the root cause of particular accident problems that came out of the consultation and ETP projects and which could not be readily identified through traditional data-based accident analysis.

10.2.3 Road safety in Bradford is coordinated by a multi-agency steering group that includes Bradford Metropolitan District Council, Bradford Vision, West Yorkshire Police, primary care trusts and West Yorkshire Fire and Rescue Service. The steering group works not only to reduce casualties but also to promote healthy activity. This approach, with emphasis on four key areas; environment and facilities; skills to be safe; responsibility and awareness; and behaviour, allowed schemes to be identified using the diverse range of experience in the community to address issues. Further to this, the joint working approach enabled early identification of aims and objectives complementary and beneficial to multiple parties involved in the steering group. The benefit of this during delivery is the ability to draw on a broader range of expertise and experience from within these organisations as well as providing multiple funding streams.

10.2.4 Examples of the types of initiatives implemented are summarised below, but the schemes were typified by high levels of community involvement and partnership working through neighbourhood action plans and with the primary care trust.

Scheme examples:

- Safer Places to Play (£255k). Objectives included regeneration of parks, development of safer routes to parks and support for projects that create safer play areas.

- Community education programme led by the appointment of a project worker to disseminate information to public and voluntary workers and to integrate road safety into mainstream activity (£60k).

- Injury Minimization Programme providing children with skills and knowledge to minimise injury, provide first aid and basic life support skills (£60k).

- In car safety to increase usage of seat belts and child car seats through standalone education initiative and in conjunction with provision of subsidised car seats (£20k).

- Road Injury Prevention Project, delivering preventative, multi-agency, health-based programmes across the 4 PCTs, Social Services, and family centres via a health liaison worker providing support, resources and training. (£200k).

The results

10.2.5 The Council estimated having approximately 100 projects associated with NRSI. The approach and commitment demonstrated by involving its local communities in the decision-making process was demonstrated by its invitation to give a presentation to the Home Office as part of Civic Pioneers. (Civic Pioneers are local authorities who are committed to engaging the communities they work with and sharing their learning.)

10.2.6 Casualty data has been provided by the Council for three year periods before and after the implementation of safety schemes as part of the Neighbourhood Road Safety Initiative. Before data represents the three years from July 2001 to June 2004 and after data from July 2006 to June 2009.

Table 10.1: Bradford All Injury Accidents (annual average)

	Fatal	Serious	Slight	Total
Before (2001-2004)				
Toller Ward	1	44	381	426
Bradford Moor	0	34	458	492
After (2006-2009)				
Toller Ward	2	16	248	266
Bradford Moor	5*	30	293	328
% Reduction				
Toller Ward	100.0	-63.6	-34.9	-37.6
Bradford Moor	-*	-11.8	-36.0	-33.3

**Recorded fatalities involved a single incident where four occupants of a stolen car were killed driving off at high speed from a police patrol. The associated fatalities have been removed from the analysis for clarity.*

Table 10.2: Bradford Child Casualties

	Fatal	Serious	Slight	Total
Before (2001-2004)				
Toller Ward	0	15	63	78
Bradford Moor	0	9	71	80
After (2006-2009)				
Toller Ward	1	8	37	46
Bradford Moor	1*	11	44	56
% Reduction				
Toller Ward	-	-46.7	-41.3	-41
Bradford Moor	-*	22.2	-38	-30

**Recorded fatalities involved a single incident where four occupants of a stolen car were killed driving off at high speed from a police patrol. The associated fatalities have been removed from the analysis for clarity.*

10.2.7 Table 10.3 shows the calculated rate of return for Bradford based upon the annual average casualty reduction with the full three years of after data. Rather than the traditional first year rate of return, an average figure for a full three years post-implementation is considered more appropriate, given that it is reasonable to assume that ETP projects require a longer period of time to be reflected in accident figures. Many of them are geared towards long term behavioural and cultural change and therefore is unlikely they will have the same immediate impact that an engineering scheme will.

Table 10.3: Bradford rate of return – whole project area

Casualty Classification	Fatality	Serious	Slight	Total
Average casualty reduction	+1	-9.7	-99.3	
Accident cost* £000s	1,585	273	13.7	
Cost saving £000s	+1,585	1,900	1,364	**1,690**
Scheme cost (£000s)				1,000
Rate of return				
Rate of Return**				**148%**

** Reported Road Casualties Great Britain: 2009*

*** Adjusted to reflect findings from DfT Road Safety Research Report No. 108. A factor of 0.88 has been applied to reflect the national reduction in casualty numbers*

Conclusions

10.2.8 As the data demonstrates, the level of casualty reduction and the rate of return achieved in Bradford is encouraging. The rate of return in particular is considerably higher than the initial results in Birmingham, however this is mostly due to the reduction in slight casualties. The reduction in KSIs is fairly small in comparison.

10.2.9 Whilst direct conclusions cannot be drawn with Birmingham until completion of its ETP work and subsequent monitoring is complete, there are some points worth highlighting when comparing the two projects:

- the ETP driven approach has delivered significant reductions in slight casualties in the project area, however the impact upon KSIs is less marked with quite different results between the two wards involved; and

- results indicate that engineering projects in Birmingham have been very successful in reducing KSIs across the entire project area, particularly amongst vulnerable road users, however there has been a far less marked reduction in slight casualties.

10.3 COMPARISON WITH MIXED PRIORITY ROUTES AND SIMILAR SCHEMES

10.3.1 The MPR schemes were delivered with budgets ranging from £1.3m to £4.5m for relatively small scheme areas (between 1/3rd mile and 1 mile lengths). The two comparable schemes implemented by Birmingham, Alum Rock Road and Coventry Road, cost £1.46m and £1.74m respectively with lengths of 1.7 miles and 1.2 miles. The average cost per linear metre is £3,300 for all ten MPR schemes and just £700 in Birmingham.

10.3.2 Additionally, two further route treatment schemes were developed in Brighton and Worthing that were led by the local authorities without the same level of funding made available as part of a demonstration project (although additional external funding was secured following the inception of the schemes).

10.3.3 This retrospective with regards to analysis of the MPR schemes helps to address two questions raised about the project post-completion and draws further important conclusions with regards to route treatment schemes:

- What would a similar MPR scheme look like without the £1m DfT grant funding driving it's delivery (at very least allowing its inception)?

- How would the road safety impact of the scheme be affected if delivered on a low-cost basis, particularly without the extra investment in materials and finish quality?

The results

10.3.4 Table 10.4 shows the results for the MPR projects, including Brighton, Worthing and the routes schemes delivered in Birmingham. The majority of MPR authorities delivering schemes as part of the demonstration project have a full three years of post-completion monitoring data whilst Brighton, Worthing and the Birmingham assessment of accident reduction is based upon shorter periods to provide an initial comparison.

Table 10.4: MPR Scheme casualty reduction

MPR Casualties (annual average)			
Scheme	**Before**	**After**	**Change**
Crewe	12	10	-17%
Hull	10.2	10	-2%
Lambeth*	41	-	-
Leamington	13.6	13.6	0%
Liverpool	50.5	29.8	-41%
Manchester	53.3	38.7	-27%
Norwich	15.3	5.6	-63%
Oxford	20.4	13.4	-34%
St Albans	18.6	11.6	-38%
Southwark	73	54.5	-25%
ICSDP Casualties (annual average)			
Alum Rock Road	24	15	-38%
Coventry Road	22	14	-36%
Independent Schemes Casualties (annual average)			
Brighton**	13	7	-46%
Worthing	8.2	3	-63%

**Full after data unavailable at time of writing*

***At the time of writing the second phase of the Brighton project has not been completed and results shown provide only an early indicative view.*

10.3.5 On the basis of casualty reduction, despite the lower budgets available, the Birmingham, Brighton and Worthing schemes all show promising results. The two Birmingham schemes show reductions largely in line with the overall reductions throughout the whole scheme area but it is worth noting that neither scheme area had recorded any significant numbers of KSIs and the reductions are almost entirely in slight casualties. As a result, the estimated first year rate of return is a lot lower than might otherwise be expected at 8.5% for Alum Rock Road and 6.3% for Coventry Road.

10.3.6 It should be noted that many of these projects take a number of years to deliver. Urban casualty numbers have been reducing at around 4% per annum since 2002 and most projects took 3-4 years to complete. Reductions of less than 17% on base values could therefore be considered a failure (see table 10.5 below for UK statistics for all urban roads). However, in all cases the level of usage of the streets by vulnerable road users has increased markedly, and this significantly increases exposure to risk. As a result, clear conclusions cannot be drawn.

Table 10.5: UK Casualty reduction, all urban roads, 2002-2009

Casualty Reduction on UK Urban Roads			
Year	**Casualties**	**Year on year reduction**	**Cumulative reduction (on 2002)**
2002	142,597	-	-
2003	136,668	4.2%	4.2%
2004	130,347	4.6%	8.6%
2005	125,350	3.8%	12.1%
2006	118,656	5.3%	16.8%
2007	113,392	4.4%	20.5%
2008	107,561	5.1%	24.6%
2009	103,581	3.7%	27.4%

Conclusions

What would a similar MPR scheme look like without the £1M DfT grant funding driving it's delivery (at very least allowing its inception)?

10.3.7 Whilst Worthing offers a valid 'low-cost' comparison, over 50% of the scheme cost was through the Road Safety Partnership Grant scheme. Low-cost schemes can be delivered, however the four schemes delivered since the completion of the MPR project do reinforce the message that delivering schemes in such complex environments is expensive. As such it is unlikely that this kind of project would be delivered without additional funding being secured alongside transport budgets.

How would the road safety impact of the scheme be affected if delivered on a low-cost basis, particularly without the extra investment in materials and finish quality?

10.3.8 Early results show that casualty reduction on the 'budget' schemes has been broadly in line with the similar MPR schemes. However, it should be noted that this is likely to be at some detriment to the anticipated wider benefits, although it could be argued that this will largely depend upon scheme location and consideration needs to be given to the likely benefits when scheme designs and costs are under scrutiny.

Appendices, Figures & Tables

Appendix A TRL Baseline Statistics Report

Inner City Safety Demonstration Project: Baseline statistics report

by L Crinson, J Sentinella, A Martin, and A Davis

UPR SE/087/04
Clients Project Reference Number

UNPUBLISHED PROJECT REPORT

TRL Limited

UNPUBLISHED PROJECT REPORT UPR SE/087/04

Inner City Safety Demonstration Project: Baseline statistics report)

November 2004

by L Crinson, J Sentinella, A Martin, and A Davis (TRL Limited)

Prepared for:Project Record: Inner City Demonstration Project

Client: Babtie Ross Silcock FOR DfT

	Approvals
Project Manager	
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CONTENTS

Executive summary

The aim of the Inner City Safety Demonstration Project (ICSDP) is to demonstrate that road safety and general quality of life in a deprived inner city area can be improved using a partnership approach in which regeneration and other agendas are integrated and all local communities are involved. This integrated approach has grown from the concepts of Urban Safety Management

This report offers a range of baseline data about the area of East Birmingham covered by the project as part of the evaluation and monitoring of the project. It includes data from a range of sources including the 2001 census, schools, police, benefits agency, Birmingham City Council (BCC) and specific surveys in the area.

The evaluation will seek to understand how addressing underlying factors in deprived areas can reduce road casualty rates. These factors include a poor road environment, lack of understanding or appreciation of road safety and excess levels of through traffic. The evaluation needs to consist of three parts, local context study, process evaluation and outcome evaluation, and will focus upon the objectives for the ICSDP, as defined by the project team with DfT on 22 January 2004. These are:

Objective 1: To have a measurable impact on road safety in actual and perceived terms

Objective 2: To integrate road safety activity into the regeneration and other agendas and build partnerships for delivery

Objective 3: To secure inclusive engagement and participation with a diverse community, and influencing local views about road safety

Objective 4: To improve accessibility to jobs, services and leisure opportunities

Objective 5: To improve quality of life; a safer, vibrant, more stable community with improved measures of social capital

At the start of the project, the area of the covered Washwood Heath ward and parts of Nechells, Sparkbrook and Small Heath wards. In September 2004, the ward boundaries were changed. The project area now comprises of the whole of Washwood Heath and Bordersley Green wards, plus parts of Nechells, South Yardley and Hodge Hill wards. The data in this report refers to the wards as they were at the start of the project. Some of the wards names are the same, but now refer to different areas, so care should be used when making comparisons to data in this report for wards. Any data available at the lower COA level should remain unaffected.

The baseline data has been collected to ensure that as the evaluation of the project develops, comparison data will be available to evaluate its effects. Data from the 2001 census has been used to provide a snap-shot of the whole area at that time, but if this data is to be used to assess changes it will be necessary to collect sample data since the full survey will not be re-done until 2011. The data from the 2001 census is divided into Census Output Areas (COA) or ward boundaries, and, therefore data from this source does not match exactly to the ICSDP area; COAs were used where any part of the COA fell within the ICSDP area.

Other data (e.g. crime data, employment data) have been gathered from a number of sources, and therefore sometimes refers to different base areas.

Some data (e.g. accidents) is located using Ordnance Survey Grid References (OSGR) and can be mapped exactly into the ICSDP area.

Most of the data used in the Baseline Report are available for other areas which could be used as controls when assessing the effects of changes implemented as part of the project. Comparisons are possible with other Local Authority wards (within Birmingham, and in other parts of England) or with England or GB data as a whole. Within Birmingham, the most suitable wards are Aston, Handsworth

and Soho, which are in the top ten most deprived wards in Birmingham (as are the four wards in the project area), and have similar proportions of children and ethnic mix to the project area.

A Street Audit was undertaken by Steer Davies Gleave for BCC. This involved external auditors scoring zones on litter, graffiti, repair of buildings, general attractiveness and personal security. There are relatively few areas of the project area which were judged to be attractive, which is not surprising as litter, vandalism and general repair of buildings are also problem areas. Personal security is also a large problem in many areas, but can often be linked with the appearance of an area, since in some areas the actual street crime rate was low, but personal security was scored as 'very unsafe'. If the streets were tidied up, it may help people feel safer and also create a feeling of ownership, encouraging the community to take responsibility for maintaining the cleanliness of the streets. Crime, litter and youth gangs were also mentioned as bad things about the area in the Attitude survey.

In 2004, the index of multiple deprivation (IMD) was calculated for each ward, which contains seven domains of deprivation, each containing a number of indicators. All four wards in the project area had a total IMD score greater than 50, compared with 37 for the whole of Birmingham and 21 for the whole of England. The four wards fall into the top 3% of the most deprived wards in England. Sparkbrook is the most deprived ward in the project area, and is ranked 42 out of 7,170 wards in England.

The census data gives a basic picture of the area. The area has a large number of young people (one third are under 16) and is predominantly non-white, with people of Pakistani origin making up the largest group. A majority (58%) state their religion as Muslim, with a significant (28%) Christian population, and a mix of other religious groups. This makes the role of church leaders a key factor in developing a positive programme of change in the area.

The area includes a large number of people claiming to have no formal qualifications on their census return (52% of 16-74 year olds, compared with 29% of this age group in England and Wales as a whole).

Car ownership is relatively low with almost 50% of households having no car or van (compared with 27% for England and Wales as a whole). Despite this, over 50% of those in employment travel to work as either the driver or passenger in a car or van. The number of unlicensed vehicles observed the streets on during the attitude survey or mentioned by the residents surveyed implies that there may be more vehicles available to people in the area than the census data shows. This is something on which local police may be able to provide more detailed information.

A quarter of residents travel to work by bus compared with 7.4% in England and Wales.). The attitude survey showed that while most bus services were judged to be good, there were some services which were perceived as unreliable, especially in the evenings. This indicates a strong need to concentrate future initiatives on non-car modes of transport, particularly the bus, and particularly those services running to the North East of the project area, where there are many jobs (see section 11). It may be that there is already a good public transport system in place to the North East of the project area because there is a strong need, however this may be to the detriment of other parts, and so an analysis of public transport services should be undertaken and reviewed throughout the term of the project. The impact of introducing new services should also be examined, including physical and psychological changes.

A high number of households in the area have dependant children, and a quarter of these are lone parents. School programmes may be a fruitful way to access these households. Contact may also be possible via Health Visitors and doctors' surgeries.

Young TransNet will be a useful source of data on travel to school, and the number of schools taking part needs to be monitored. There were four schools that took part in 2003/04.

Unemployment is relatively high in the area. In the wards covered by the project area between 7% and 11% of those aged 16-59 years are claiming Job Seekers Allowance (compared to less than 3% across England and Wales). This suggests that Job Centres might provide a way of reaching a group which may not otherwise be easy to reach for education and information initiatives.

The majority of all casualties in the area were drivers or passenger in cars. However over half of the child casualties were pedestrians. More detailed data on these accidents is needed to establish whether better play facilities, or better pedestrian links between homes and places children wish to visit, would reduce this toll.

The quality and type of the housing stock in the area will impact on the availability of safe places for children to play. Much of the housing is in terraced rows and many of these houses have minimal or no front gardens. More data on where children play may be available from the Street Audit process as the project progresses. Overcrowding in houses is also a large problem.

Problems with some of the parks as 'no-go' areas because of drugs etc were highlighted by the Attitude survey. Involvement of green space initiatives such as the Groundwork Trust may be a way of increasing the use of these spaces and thus reducing the potential risks of playing in the streets.

Social capital consists of the networks, norms, relationships, values and informal sanctions that shape the quantity and quality of society's social interactions. The inner city study area is comprised of multi-ethnic communities characterised by strong social bonds. It is recommended that the study focus its attentions on strengthening and 'bridging' social capital between the eleven different ethnic groups residing in the area. The study can facilitate this process by encouraging key groups in the community (such as faith groups, welfare groups and neighbourhood forums) to consult one another on road safety concerns and in identifying appropriate interventions to be implemented by the study. Through collective decision-making on a controversial issue that affects the entire community, discussion of road safety solutions can unite the heterogeneous community.

The ONS social capital question set should be used as part of the annual attitude survey undertaken by SRa in subsequent years of this project

Additional data is required to complete the baseline picture of the study area, and which may be obtained from a variety of sources. This data should be monitored annually throughout the project to measure impact on the beneficiaries, and an evaluation be undertaken at the end of the project and subsequently to ensure that positive impact is continuous and transferable to other wards in Birmingham, and indeed the whole of Britain. Some of the data can only be accessed from project partners, such as the police, once partnerships have been forged with BCC. Other data needs to be obtained and analysed by BCC and also UWE.

In summary, the following issues were highlighted as key findings from data available in the ICSDP study area, and areas that require attention for the remainder of the project:

- The wards of the ICSDP area are significantly disadvantaged in terms of the Index of Multiple Deprivation 2004
- The ICSDP area has a younger than average population (particularly those under 30 years old) compared with the average for England and Wales and has an extremely large minority ethnic population (70% minority ethnic)
- The majority of people in the area give their religious affiliation as Muslim
- The ICSDP area has a higher than average proportion of lone parents with dependent children, compared to the average for England and Wales.
- Less than half of the ICSDP area population (47.5%) own or have access to a car or van (compared with 26.8% in England and Wales
- A high number of pupils at schools in the area speak an additional language, and a high percentage of pupils are eligible for free school meals.
- Performance in KS2 is lower than average for three quarters of the primary schools in the area,
- 52% of the population aged 16 to 74 in the project area have no qualifications, and in nine census output areas, over 60% of people do not have any qualifications.

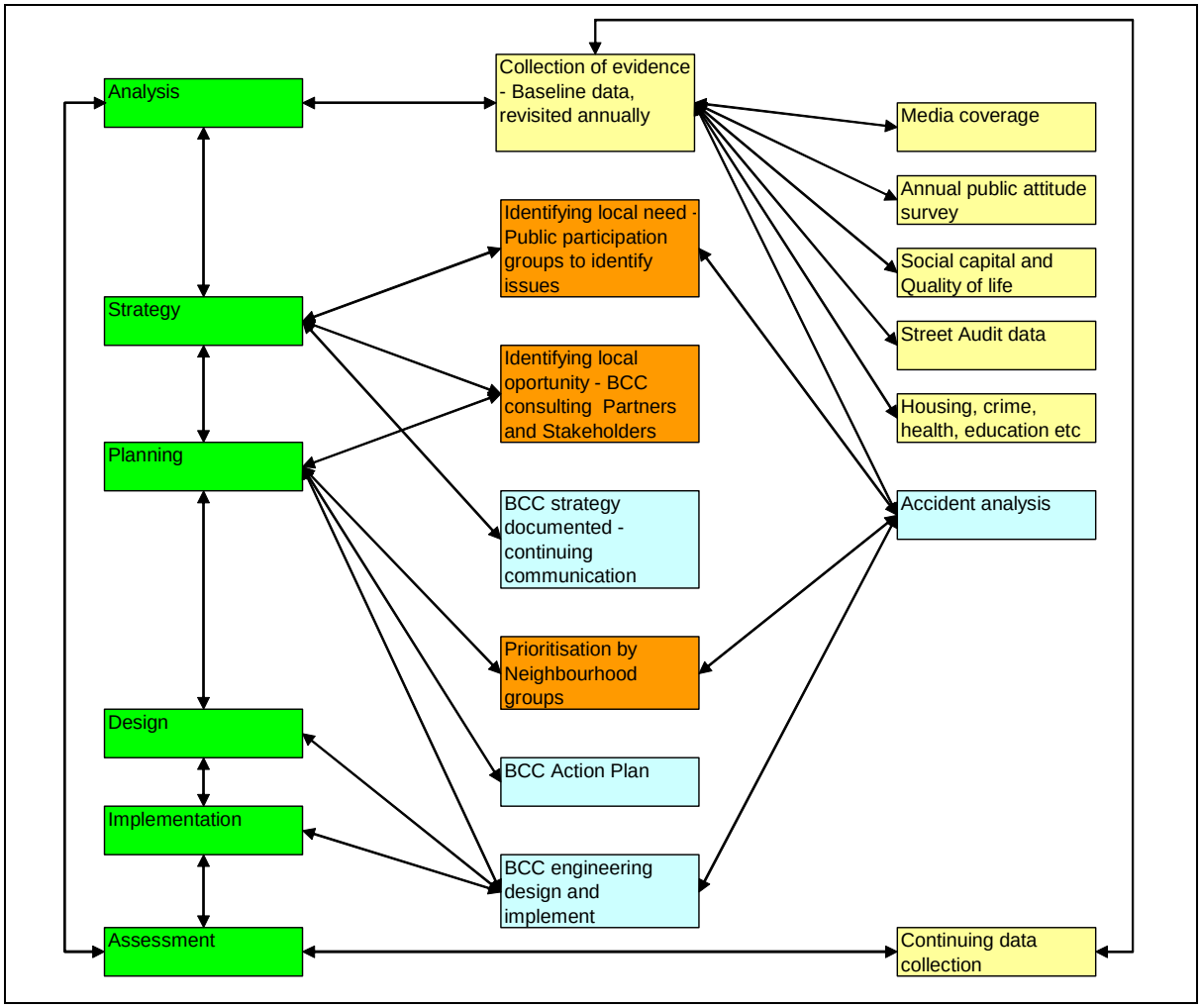
- A fifth of people in the project area aged between 16 and 74 have never worked, compared with 3% in England and Wales. Of those who do work, half work in routine or semi routine occupations
- Between January 1998 and February 2004, 16 people were killed, 222 people seriously injured and 2,438 people seriously injured in road accidents in the project area (Stats19 data
- 11% of casualties were child pedestrians and cyclists.
- There is a high incidence of 'hit and run' accidents in the project area.
- Most of the pedestrians injured who were crossing the road were not using a crossing, and were often masked by a vehicle
- For children aged less than 11, 85% of casualties were not making school journeys. For 11-15 year olds, 37% of casualties were on a school journey.
- Excessive speed was a contributory factor in 3% of accidents. Careless/thoughtless/reckless and inattention were the most common factors.
- Personal security is a large problem in many parts of the ICSDP area

1 Introduction

The aim of the Inner City Safety Demonstration Project (ICSDP) is to demonstrate that road safety and general quality of life in a deprived inner city area can be improved using a partnership approach in which regeneration and other agendas are integrated and all local communities are involved. This integrated approach has grown from the concepts of Urban Safety Management set out in the Urban Safety Management Guidelines (2003). The area selected for the demonstration project was an area of East Birmingham (see Section 3 for details)

Birmingham City Council (BCC) have already started to develop their framework for delivering the project. Figure 1-1 shows how some of the planned activities link into the basic stages of the Urban Safety Management structure. A Gantt chart produced by BCC which shows outline time scales is given at Appendix A. It is clear that the required data covers much more than the road safety data which would traditionally be part of Urban Safety Management but the overall pattern of strategy development leading to interventions which need to be monitored remains. What is added is the need to monitor a much broader range of data to assess the impact of the project on quality of life , social capital, and other deprivation indices.

Figure 1-1 Linkages between ICSDP activities



The purpose of this report is to identify existing data on a range of relevant issues and also to identify where existing data needs to be enhanced by further investigation. It sets out some of the implications which can be drawn from the existing data but it is not exhaustive in its coverage. Data from a wide rage of sources has been drawn together and possible further sources of data are identified. It is understood that further analysis of some of this data will be carried out as part of Birmingham City Council's collaboration with the West Midlands Joint Data Team.

The report also sets out the objectives for the evaluation agreed with DfT and the evaluation framework developed by TRL (see Section 2).

2 Evaluation Framework

2.1 Objectives

The objective of the evaluation of the Inner City Safety Demonstration Project (ICSDP) is to determine what interventions within the community are effective, for whom, in what respects and what circumstances. The findings of the evaluation should assist other Local Authorities deliver casualty reduction targets for 2010 by providing an insight into how to address the higher incidence of road casualties in deprived communities.

The evaluation will seek to understand how addressing underlying factors in deprived areas can reduce road casualty rates. These factors include:

a poor road environment

lack of understanding or appreciation of road safety

excess levels of through traffic.

The evaluation will focus upon the objectives for the ICSDP, as defined by the project team with DfT on 22 January 2004. These are:

Objective 1: To have a measurable impact on road safety in actual and perceived terms

Objective 2: To integrate road safety activity into the regeneration and other agendas and build partnerships for delivery

Objective 3: To secure inclusive engagement and participation with a diverse community, and influencing local views about road safety

Objective 4: To improve accessibility to jobs, services and leisure opportunities

Objective 5: To improve quality of life; a safer, vibrant, more stable community with improved measures of social capital

2.2 The Framework

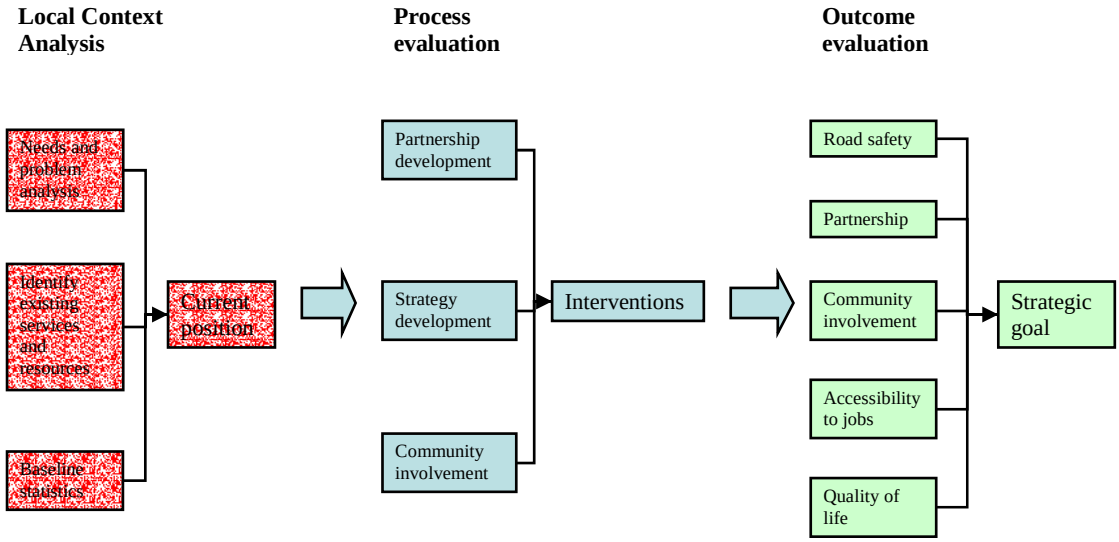
The evaluation needs to consist of three main parts:

Local Context study

Process evaluation

Outcome evaluation

Figure 2-1: Evaluation Framework



2.3 Local context analysis

This initial stage of the evaluation should describe the area and provide baseline statistics. This report deals with the baseline statistics. The attitude survey conducted by Social Research Associates (SRa) is reported separately (SRa 2004)

The local context analysis should also identify what existing resources and services exist. This will come from BCC discussions with stakeholders within the Council. Data from the Accessibility Planning process will also feed into this.

2.4 Process evaluation

The process evaluation should evaluate the development and implementation of a strategy to improve road safety in the area. It will enable the programme to be replicated elsewhere by providing information on how the programme works in the area and why.

2.5 Outcome evaluation

The outcome evaluation will measure whether the project's objectives have been met. It will mainly measure changes in the baseline measures. Outcome evaluation depends on having sufficient baseline, or 'before' data to see changes resulting from the interventions which are implemented as part of the project.

Key measures are outlined below, in the context of the objectives of the project.

2.5.1 Objective 1: What impact does the project have on road safety in actual and perceived terms?

Actual road safety will be measured in terms of road casualties in the area. It will use STATS19 and other data collected by the police on accidents. It will also include hospital data on road accidents when this becomes available. Data from surveys (e.g. the annual attitude survey, perception of crime surveys) will give information on the perception of road safety in relation to other security issues..

2.5.2 Objective 2: Has the project integrated road safety activity into the regeneration and other agendas and built partnerships for delivery?

This is not an area where baseline data has a big part to play. The process evaluation will provide data on the partnership and the project strategy. A successful partnership is one that is sustainable and maintains the commitment from its partners.

2.5.3 Objective 3: How many local people are involved in the project? How many groups in the community are represented?

Information collected as part of the process evaluation on community engagement and monitoring interventions should be used to measure how many local people are involved in the project and whether those involved represent a broad range of groups in the community. The stakeholder analysis which will be undertaken by BCC will identify key groups whose opinions must be sought.

2.5.4 Objective 4: Has the project improved accessibility to jobs, services and leisure opportunities?

This outcome will be measured by monitoring changes from the baseline in terms of transport, employment, service and facilities and education statistics. The Accessibility planning process and the annual attitudes survey of residents by SRA is also providing baseline data on access to facilities.

2.5.5 Objective 5: Has the project improved quality of life in terms of a safer, vibrant, more stable community with improved measures of social capital?

Changes from the baseline levels will be analysed to investigate whether the project has produced any changes in quality of life measures, such as quality of housing, number of safe play areas, level of crime.

2.6 Data

Baseline data has been collected to ensure that as the evaluation of the Inner City Project develops, comparison data will be available to evaluate the effects of the project. Data from the 2001 census has been used to provide a snap-shot of the whole area at that time, but if this data is to be used to assess changes it will be necessary to collect sample data since the full survey will not be re-done until 2011. The data from the 2001 census is divided into Census Output Areas (COA) or ward boundaries, and, therefore data from this source does not match exactly to the ICSDP area; therefore COAs were used where any part of the COA fell within the ICSDP area.

Other data (e.g. crime data, employment data) have been gathered from a number of sources, and therefore sometimes refers to different base areas. It will be important to identify potential partners who hold useful data.

Some data (e.g. accidents) is located using Ordnance Survey Grid References (OSGR) and can be mapped exactly into the ICSDP area.

2.7 Limitations of available data

It should be noted that census data are not always accurate at small scale because people may not respond accurately, or may miss out answering some questions on the census form (see Appendix B for details of some of the issues relating to accuracy of this data)

Data from different sources will often apply to slightly different geographical areas. This may make comparisons and linkages between data sets more complex. Much of the Local Authority data is available at Ward level only. Since the ICSDP area does not exactly match up with ward boundaries

there is some lack of precision in relating the data to the area. Changes to ward boundaries in 2004 also add to the complexity of comparisons. The Census Output Areas (COAs) have remained the same, so data that is available at this level should be unaffected. See Section 3 for details of the ward boundary changes.

Data protection issues mean that some data (e.g. Police data) cannot be made available at the most detailed level because this would permit identification of individuals.

2.8 Use of Control data

Most of the data used in the Baseline Report are available for other areas which could be used as controls when assessing the effects of changes implemented as part of the project. Comparisons are possible with other Local Authority wards (within Birmingham, and in other parts of England) or with England or GB data as a whole.

It is essential that data for any control area must be already available. There is no funding for data collection outside the project area. This will mean that some detailed information (e.g. accident data not recorded onto the national STATS19 database) cannot be used. However, where the baseline data comes from publicly available websites this problem does not arise.

If a single Control area is thought to be appropriate another inner city area in a large metropolitan area could be selected, based on similar levels of deprivation or population mix. However, the use of an average over a number of areas which are similar to the Inner City area is likely to yield more useful comparisons. Taking average values of indicators over a number of other deprived inner city areas (based on the indices of multiple deprivation) will allow the closest comparison. Changes in levels on indicators of interest, rather than absolute values, will allow comparisons where the starting positions differ.

When an intervention is designed it will identify the expected impact on a range of indicators (e.g. changes to road layouts may be expected to affect casualty levels, and also accessibility, or parents willingness to allow their children to walk to school). In some cases the data will not be available for all the areas identified as forming the control average. In that case a single control area may be selected that can be matched to the local intervention area on other indicators which are not expected to change. Then the size of the intervention effect can be assessed.

Possible control areas and their merits/drawbacks are discussed in Section 4 of this report.

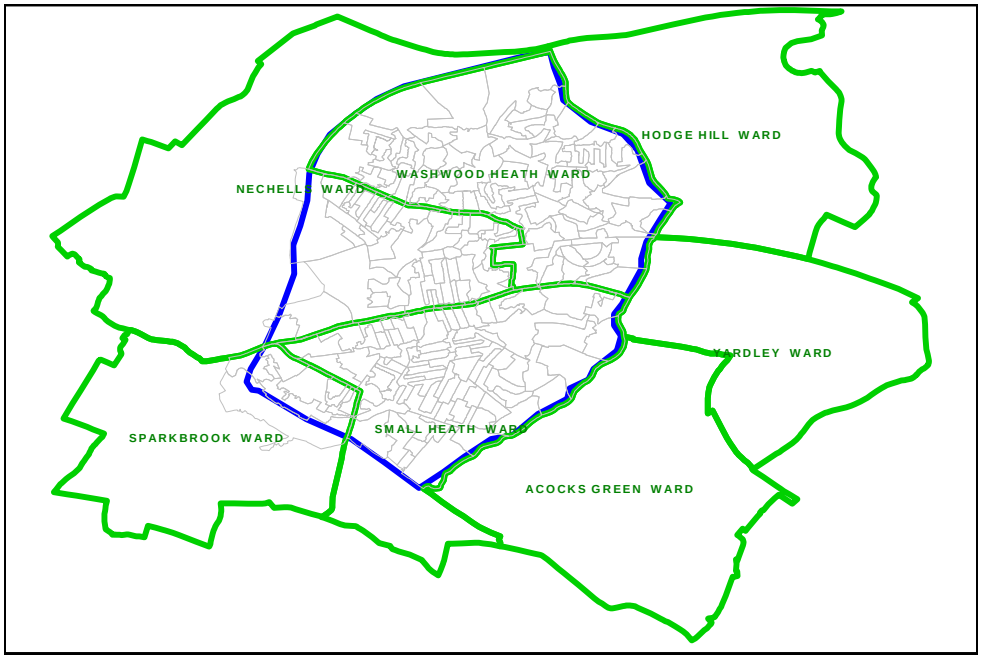
3 Geography

The Inner City Safety Demonstration Project (ICSDP) covers an area of 4.8 square miles to the east of Birmingham city centre.

Figure 3-1: Map of project area

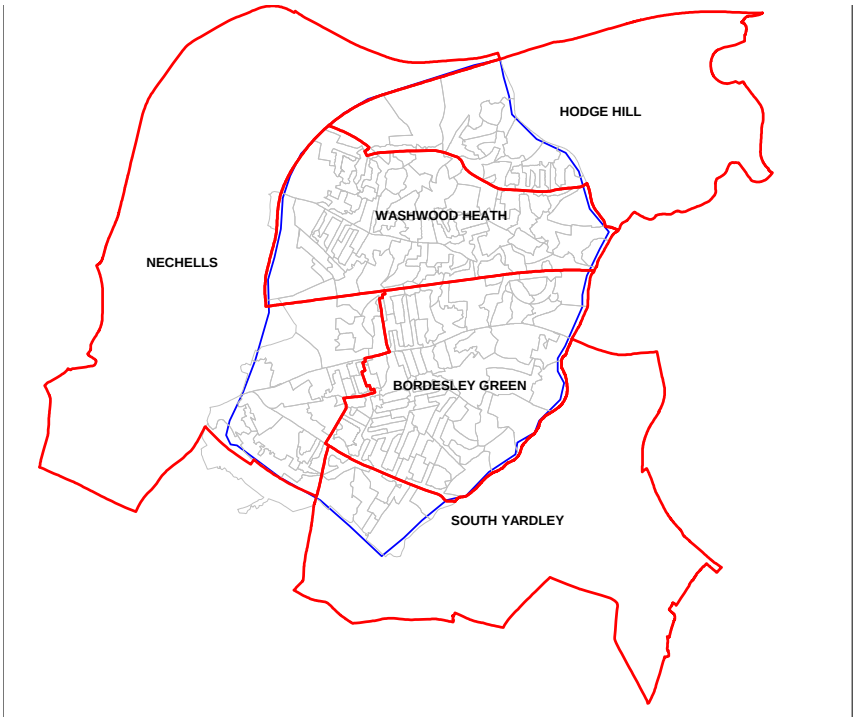
At the start of this project, the area of the Inner City Safety Demonstration Project (ICSDP) covered Washwood Heath ward and parts of Nechells, Sparkbrook and Small Heath wards. The data in this report relates to these four wards. Figure 3-2 shows a plan of the ICSDP area (blue), wards (green) and Census Output Areas (COAs). Each Census Output Area contains approximately 125 households.

Figure 3-2: ICSDP Area, Wards and COAs



In September 2004, the ward boundaries were changed and are shown below. The project area now comprises of the whole of Washwood Heath and Bordersley Green wards, plus parts of Nechells, South Yardley and Hodge Hill wards. Data such as Census data is not currently available for these new wards[1]. Future data at ward level needs to be compared with data in this report with care, since the names of some of the new wards are the same as the older wards in this report. Any data that is available at Census Output Area level should be unaffected, and Neighbourhood Statistics plan to allow users to define their own areas using output areas, which should make data retrieval easier.

Figure 3-3: 2004 Wards, project area and census output areas (COAs)



[1] Data in this report relates to the boundaries shown in Figure 3-2.

4 Control Areas

A possible control area was identified by first looking at the Birmingham wards with the highest Indices of Deprivation[2]. This included all four wards in the ICSDP and six other wards in Birmingham. Table 4-1 below shows the ten comparable wards (wards highlighted in bold are in the ICSDP).

Table 4-1: Comparison of Wards using the Indices of Deprivation

	Average of IMD SCORE	StdDev of IMD SCORE	Rank
Sparkbrook	**61.76**	**7.91**	**1**
Aston	60.81	6.48	2
Washwood Heath	**59.26**	**8.97**	**3**
Soho	57.54	9.63	4
Nechells	**55.99**	**11.34**	**5**
Handsworth	54.36	9.89	6
Ladywood	50.86	13.85	7
Small Heath	**50.07**	**7.77**	**8**
Shard End	49.69	9.58	9
Kingstanding	48.79	13.41	10

Source: national statistics, www.statistics.gov.uk

The possible control areas are unlikely to be identical to the project area, in every respect, but key census statistics can be used. Of the six wards not in the ICSDP area, Aston, Handsworth and Soho would make acceptable control areas as both the ethnicity and age group distribution seemed to be most similar to that of the wards in the project area. The three wards not included in the control area (Ladywood, Shard End and Kingstanding) were not suitable, due to a much higher percentage of white people, and much lower number of under 16'sFigure 4-1 and Figure 4-2 below show age and ethnicity splits for the proposed control areas. Although the Pakistani population is higher in the project area, the total for Indian, Pakistani, Bangladeshi and other Asian is between 42% and 57% for the three possible controls, compared with 61% in the project area. The percentage of population aged less than 16 for the possible controls is between 28% and 31%, compared with 33% in the project area. Local knowledge of the control areas may help to use the wards that match most closely.

Since the possible control areas have a high index of multiple deprivation, it is likely that other initiatives are happening in these areas over the length of this project.

Census data and other data at ward level for the possible control areas can be found at the neighbourhood statistics website, http://neighbourhood.statistics.gov.uk/.

[2] For more information about the Indices of Deprivation, see Section 16.

Figure 4-1: Control wards split by age

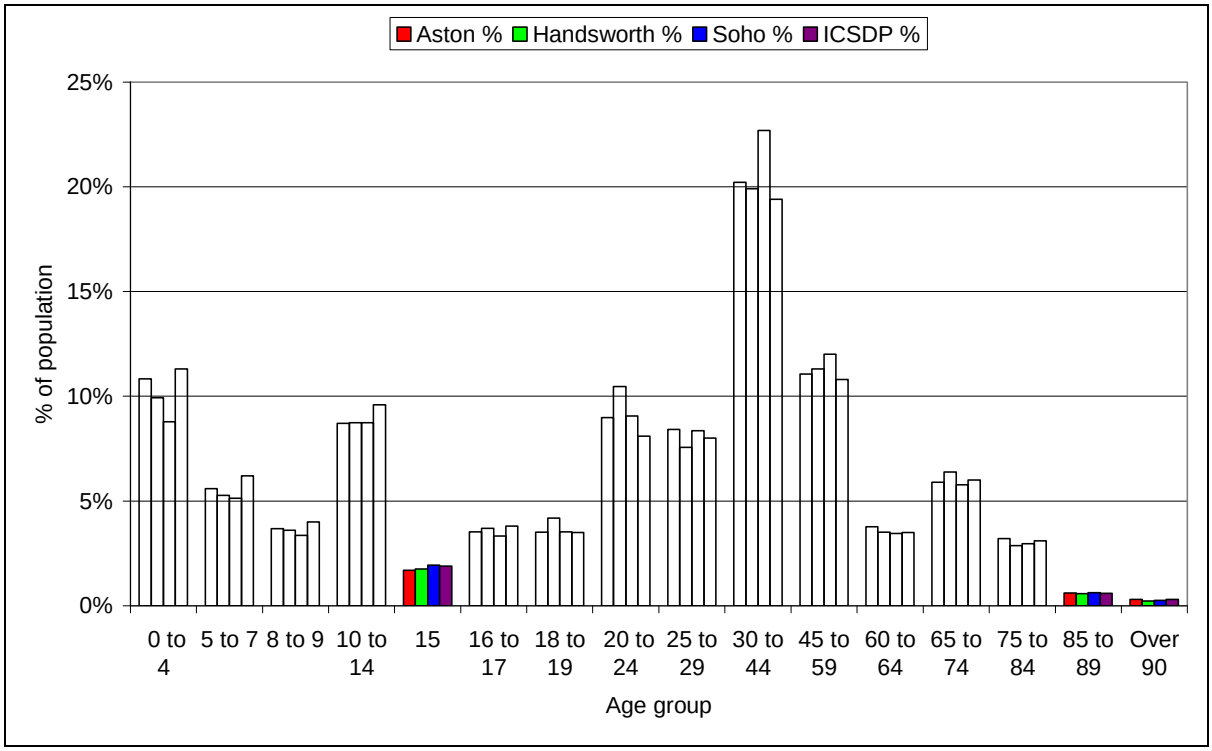
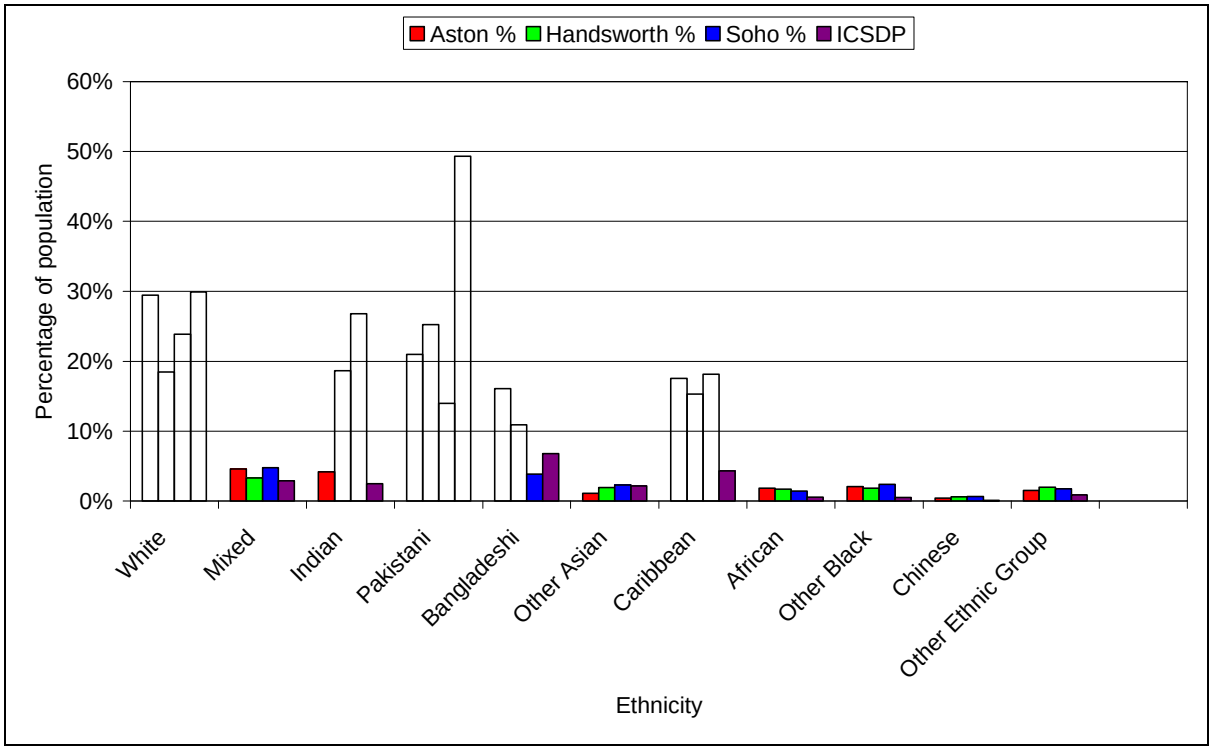


Figure 4-2: Control wards split by ethnicity



5 The Street Environment

5.1 Street Audits

The street audits conducted by Steer Davies Gleave (SDG) for BCC give information on the local physical environment for example, levels of vandalism, general attractiveness, areas with litter problems etc. The area was split into zones, and two auditors from outside of the area cycled or walked around the area taking photos of each street, defining sub-areas and scoring each on the general appearance, footways, traffic, cycling, street activity and facilities. They also made some comments on each zone.

The following maps highlight problematic areas and give an indication of the scale of the problem for each indicator. The following issues regarding general appearance have been covered:

Personal security

Presence of vandalism

Repair of buildings

General attractiveness

Presence of litter

Each sub-area was given a score 1 to 5, where 1 is very poor/worst extreme, 3 is average or acceptable, and 5 is very good/best extreme. The scores are the opinion of the auditors, and opinions will vary depending on the experiences and expectations of auditors, so discussions at the outset, and scoring of a trial area aimed to ensure consistency throughout. An audit of bus stops was also carried out.

The maps highlight that there are specific areas with problems in most of the indicators listed above. One area in particular stands out as rating poorly in each of the indicators: Adderley Park (and surrounding streets). This area consistently scores 1 or 2 in each of the assessments and is therefore a target area in terms of needing attention. Other areas, also scoring poorly are streets surrounding Coventry Road (SW of the ICSDP area), Small Heath, Little Bromwich and areas around Alum Rock.

Personal security was assessed as ‘Does it feel safe and how happy would you feel about being in area by yourself?’. The Coventry Road area, which scored 1 (very unhappy and concerned about personal security), also has a large amount of street crime (see Figure 12-2). The auditors felt too intimidated in the area on the north side of Coventry Road to spend time there to audit. Saltely, which also scored 1 on personal security, does not have a large amount of street crime. This area did have a high level of vandalism and the auditors found the area ‘very intimidating’.

5.2 Summary

There are relatively few areas in the ICSDP area which are judged to be attractive and this is not surprising as litter seems to be a big problem across most areas and the general repair of buildings is largely poor in most areas. Personal security is also a large problem in many areas, but can often be linked with the appearance of an area, since in some areas the actual street crime rate was low, but personal security was scored as ‘very unsafe’. If the streets were tidied up, it may help people feel safer and also create a feeling of ownership, encouraging the community to take responsibility for maintaining the cleanliness of the streets. Crime, litter and youth gangs were also mentioned as bad things about the area in the Attitude survey.

The people living in these more deprived areas may have different needs than those living in other parts of the ICSDP area, therefore it is essential that the views of this section of the community are

sought and acted upon. These areas may be the most difficult to tackle, but may also give good results in terms of improvements.

It is recommended that BCC target these areas in particular and actively seek the views of residents living in these streets, which may be different from the views of the external auditors.

Figure 5-1: Audit of Personal Security

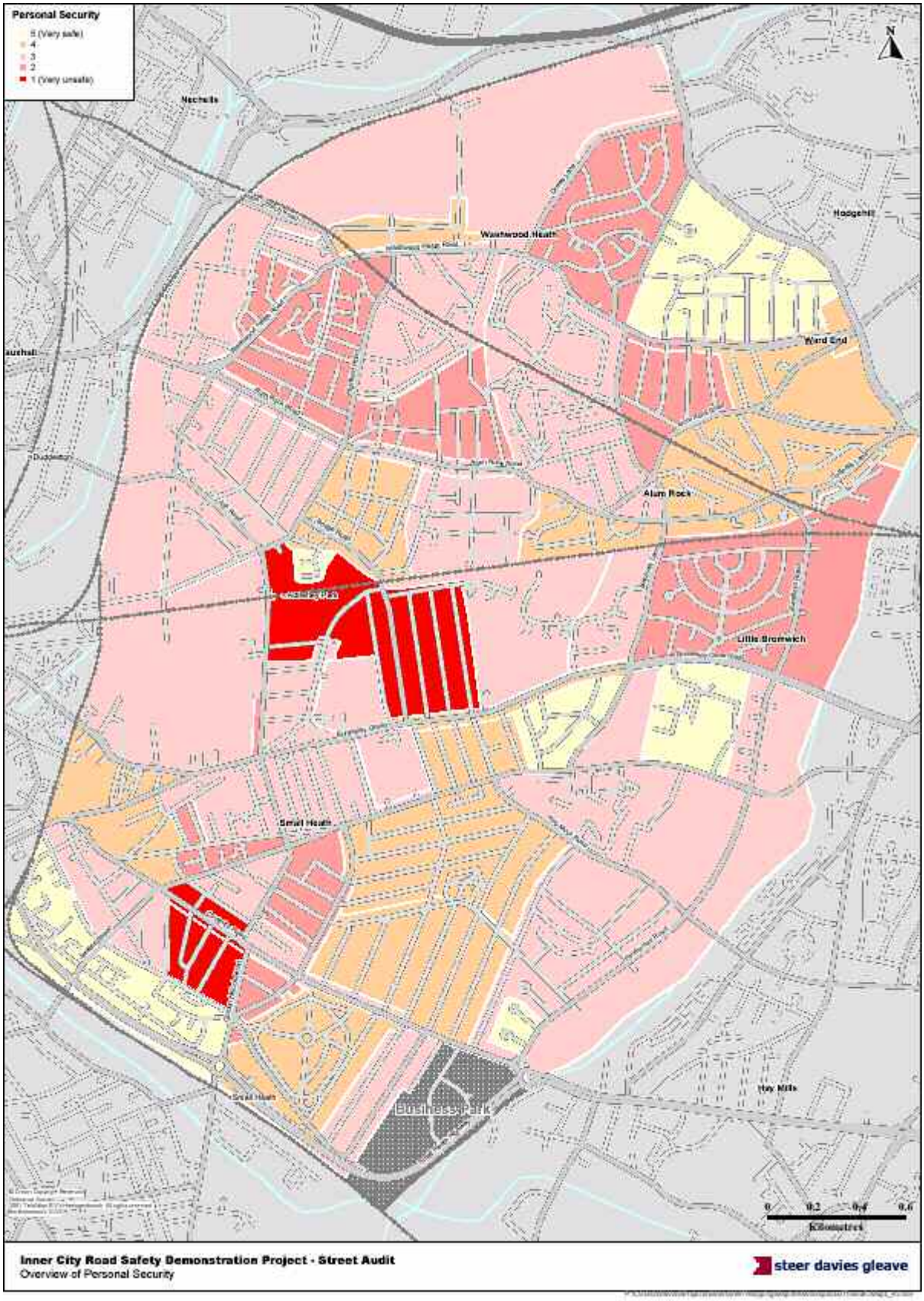


Figure 5-2: Audit of presence of Vandalism etc

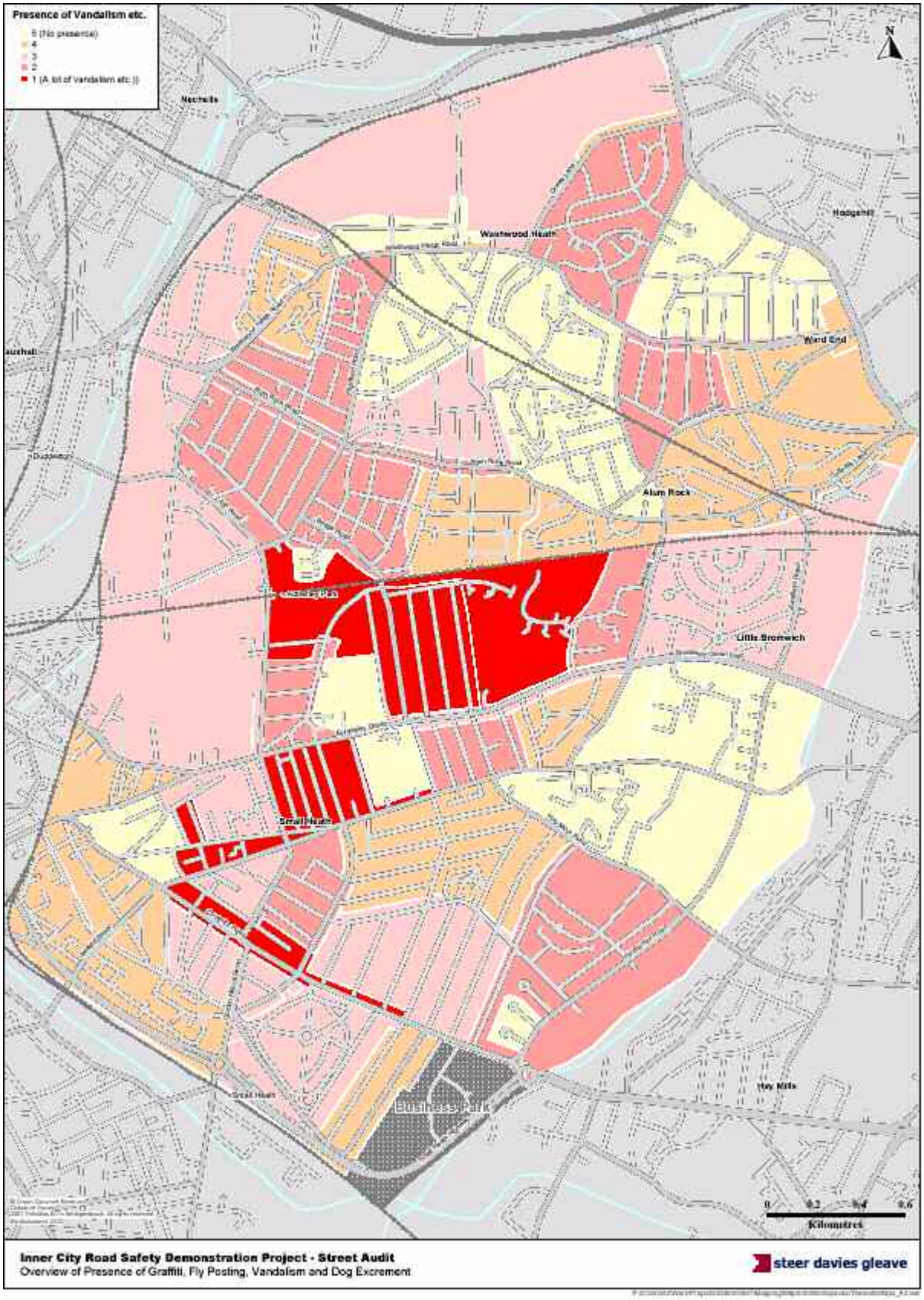


Figure 5-3: Audit of presence of Repair of buildings

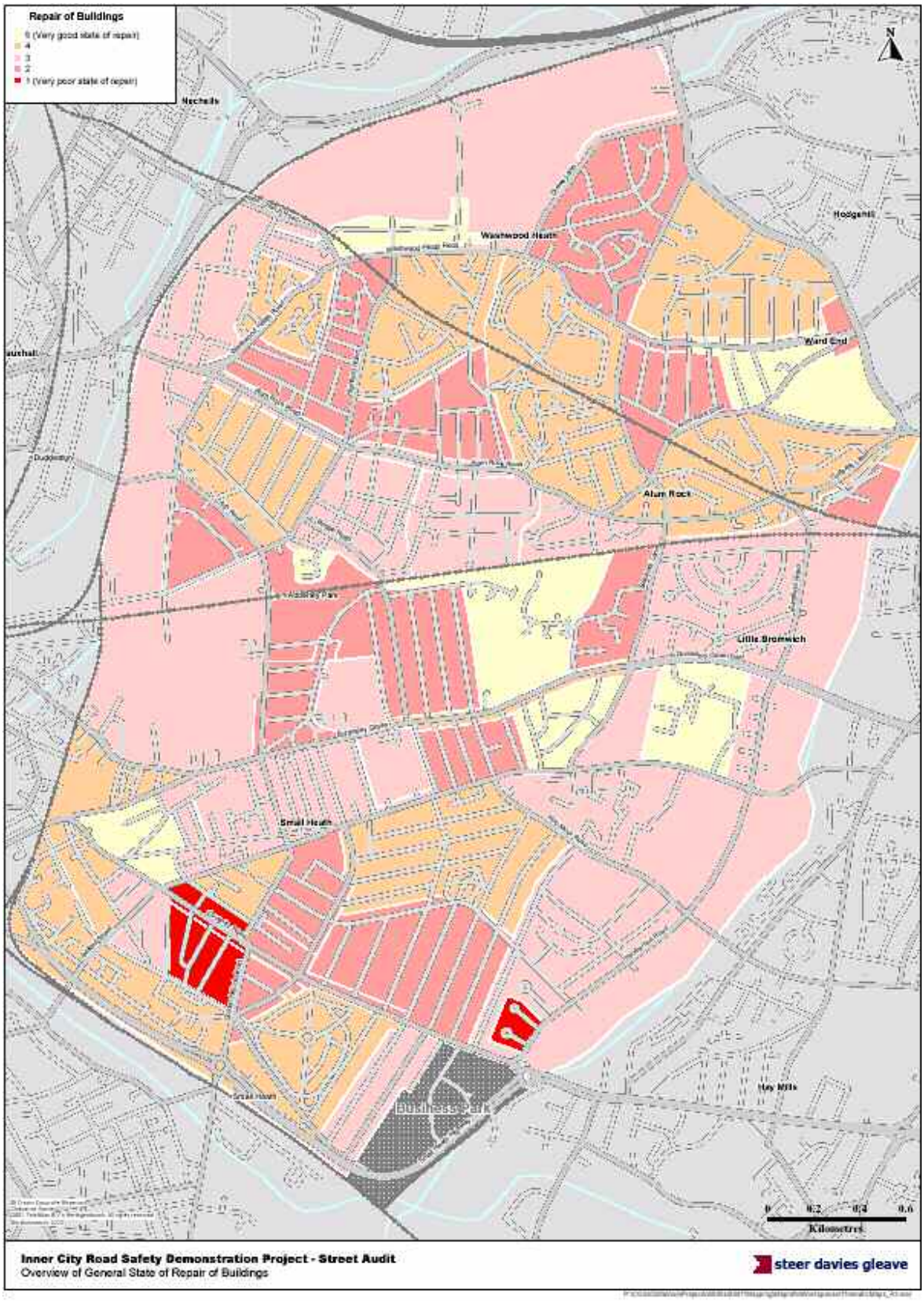


Figure 5-4: Audit of General attractiveness

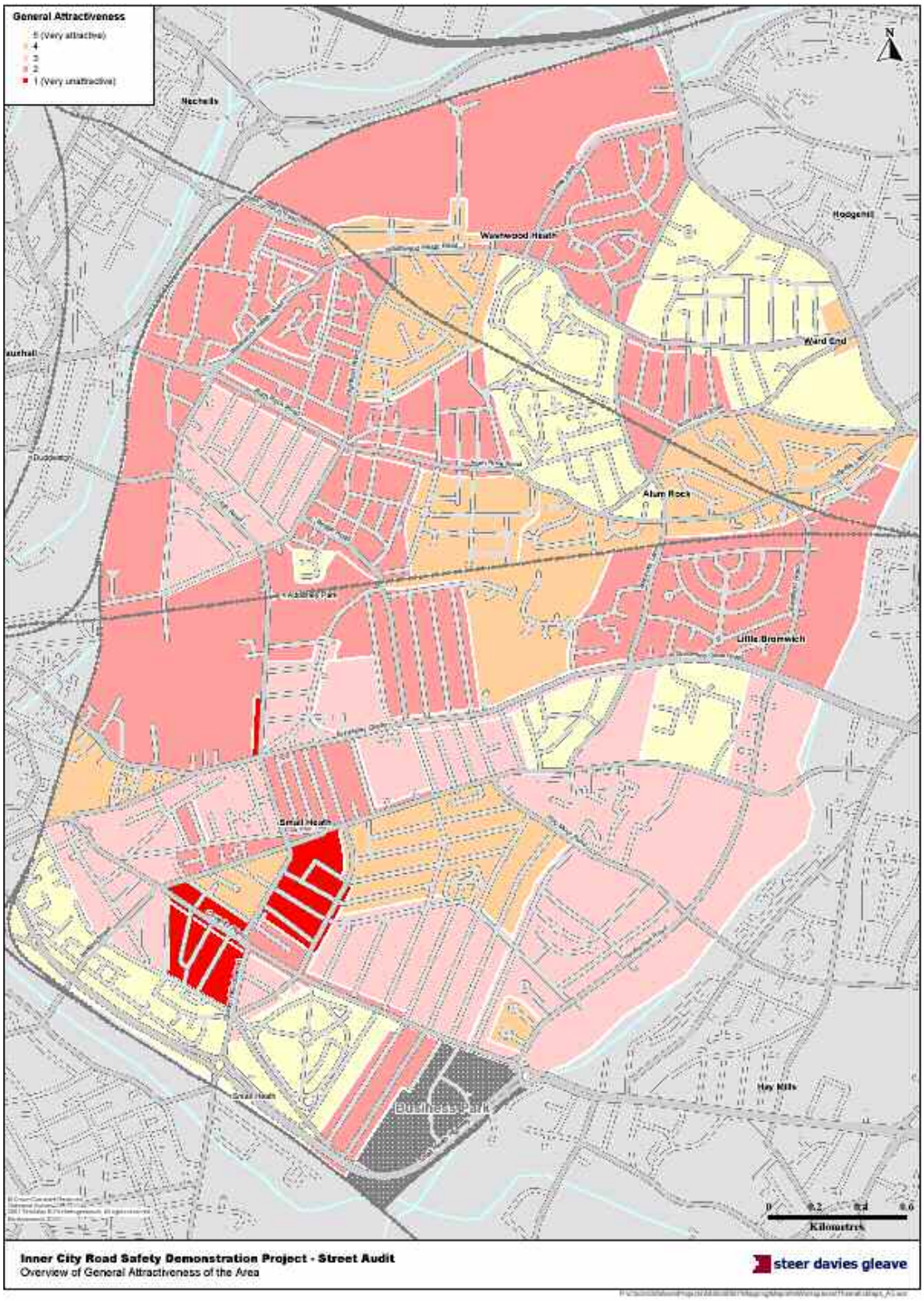
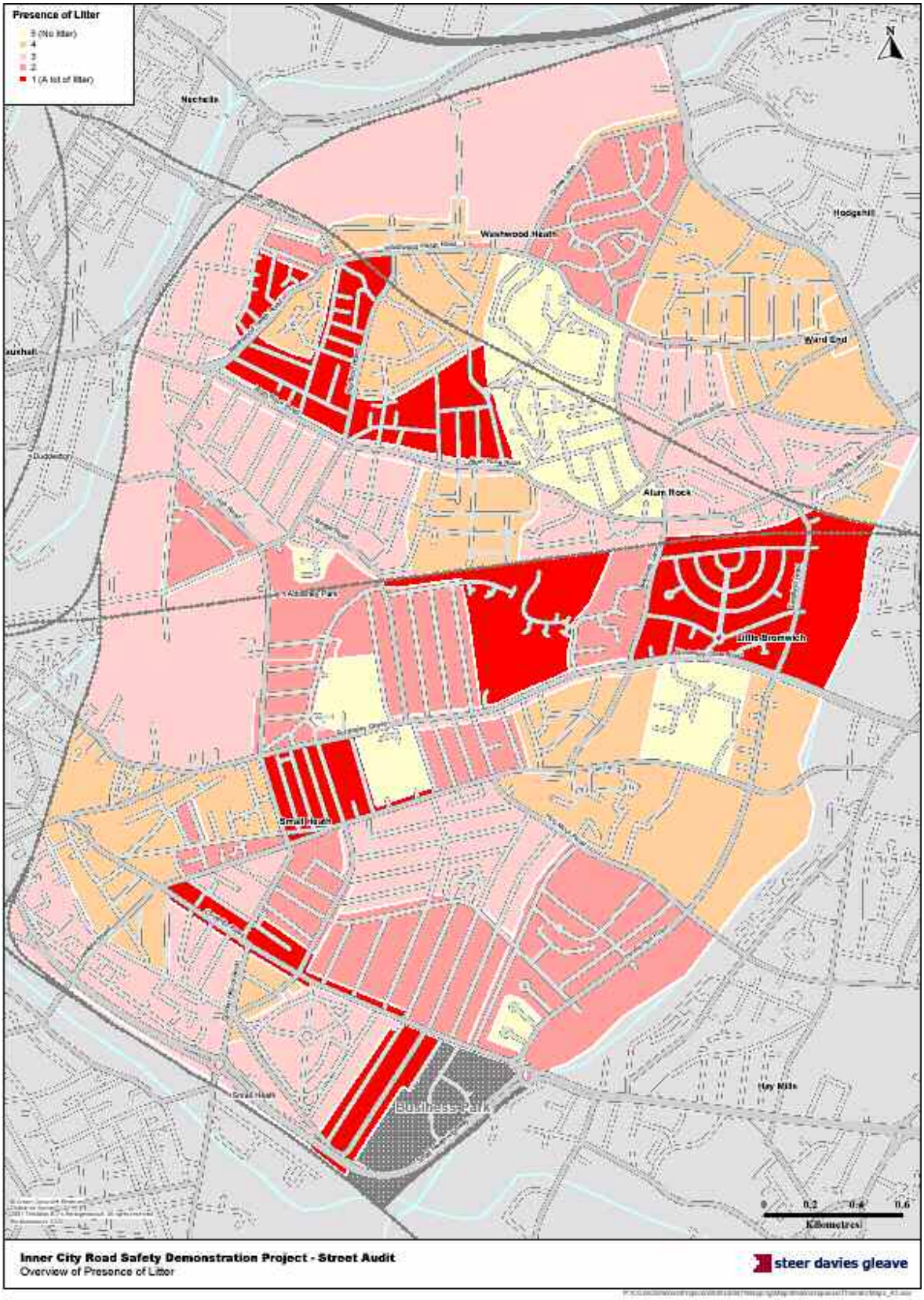


Figure 5-5: Audit of Presence of litter



6 Demographics

Demographic data is based on the 2001 census data for the area. The census data was obtained from Birmingham City Council (BCC) at census output area (COA) level where possible. Each COA consists of about 125 households. Where more detailed information was required, with variables nested, this data was obtained at ward level (about 10,000 households), to avoid the release of confidential data. Comparison data for England and Wales was obtained from the Census 2001 data held on the national statistics website: http://www.statistics.gov.uk. Significance tests have been used to compare proportions between the project area and England and Wales, and the differences are often significant, as expected, since the whole of England and Wales has very different characteristics to the project area, and that the sample size of the census (the whole population) is large.

6.1 Age characteristics

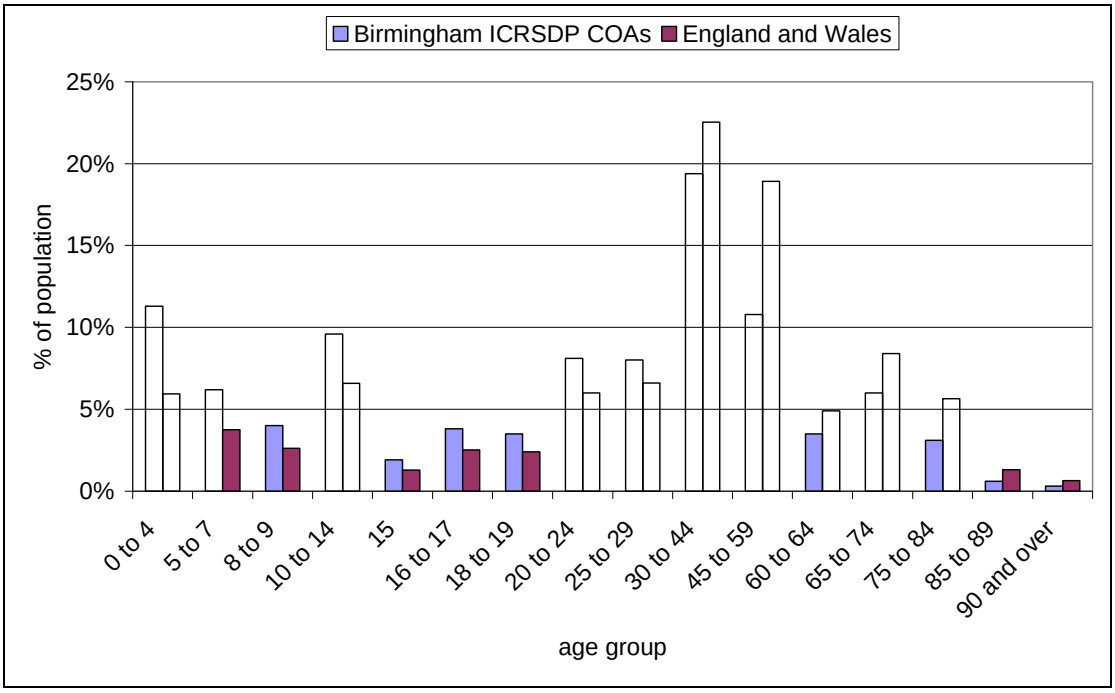
Table 6-1 shows the age profile of residents in the COAs of ICSDP area, compared to that of England and Wales. The project area has a higher percentage of residents aged less than 30 than in England and Wales. This differs especially for children, where under 16s make up 20% of the population in England and Wales, but 33% in the project area. Figure 6-1 shows the age distribution of the project area and England and Wales. Note that the age bands are not equal (for example, 15 year olds are a single category).

Table 6-1: Age profile of project area and England & Wales

	ICSDP Area		England & Wales	
Age range	**Number**	**%**	**Number**	**%**
0 to 4	8920	11.3%	3094141	5.9%
5 to 7	4874	6.2%	1946817	3.7%
8 to 9	3149	4.0%	1361037	2.6%
10 to 14	7548	9.6%	3425023	6.6%
15	1491	1.9%	661718	1.3%
16 to 17	2987	3.8%	1306500	2.5%
18 to 19	2775	3.5%	1249090	2.4%
20 to 24	6368	8.1%	3122212	6.0%
25 to 29	6289	8.0%	3435008	6.6%
30 to 44	15316	19.4%	11733473	22.5%
45 to 59	8538	10.8%	9849369	18.9%
60 to 64	2740	3.5%	2544754	4.9%
65 to 74	4718	6.0%	4367032	8.4%
75 to 84	2456	3.1%	2933337	5.6%
85 to 89	446	0.6%	676678	1.3%
Over 90	257	0.3%	335727	0.6%
Total	78872	100.0%	52041916	100.0%
Over 75	3159	4.0%	3945742	7.6%
Under 16	25352	32.9%	10488736	20.2%

Source 2001 Census

Figure 6-1: Age distribution comparing project area and England & Wales



6.2 Ethnicity

Table 6-2 shows the population of the project area and England & Wales by ethnic group. The largest group in the project area is Pakistani, making up 49% of the population. White people (British, Irish, or other white) make up 30% of the population. The Pakistani population in the project area make up 5.4% of the total England and Wales Pakistani population.

The attitude survey conducted by Sra (Social Research Associates Ltd) showed a somewhat different breakdown – 10% Afro- Caribbean, 24% Bangladeshi, 32% Pakistani, and 14% white. This may be due to the relatively small sample used in the attitude survey, or it could be a changing population (census data relates to 2001).

Table 6-2: Ethnicity

	ICSDP AREA			England & Wales		
	Number	**%**	**% ethnic minority**	**Number**	**%**	**% ethnic minority**
White	23603	29.9%	n/a	47520866	91.3%	n/a
Mixed	2260	2.9%	4.1%	661034	1.3%	14.6%
Indian	1946	2.5%	3.5%	1036807	2.0%	22.9%
Pakistani	38838	49.3%	70.3%	714826	1.4%	15.8%
Bangladeshi	5327	6.8%	9.6%	280830	0.5%	6.2%
Other Asian	1702	2.2%	3.1%	241274	0.5%	5.3%
Caribbean	3421	4.3%	6.2%	563843	1.1%	12.5%
African	506	0.6%	0.9%	479665	0.9%	10.6%
Other Black	398	0.5%	0.7%	96069	0.2%	2.1%
Chinese	98	0.1%	0.2%	226948	0.4%	5.0%
Other	724	0.9%	1.3%	219754	0.4%	4.9%
All minority ethnic population	55220	70.1%	100.0%	4521050	8.7%	100.0%
All population	78823	100.0%	n/a	52041916	100.0%	n/a

Source 2001 Census

6.3 Household composition

Table 6-3 shows the composition of households in the project area. 50% of households within the project area have dependent children, compared with 30% in England and Wales. A quarter of these households in the project area are lone parent households.

Table 6-3: Household composition

Households composition	ICSDP AREA		England & Wales	
	Number	%	Number	%
One Person: Pensioner	2677	10.8%	3126340	14.4%
One person: Other	3640	14.8%	3376272	15.6%
One family and no others: All pensioners	1065	4.3%	1942737	9.0%
One family and no others: Married couple households: No children	1500	6.1%	2815158	13.0%
One family and no others: Married couple households: With dependent children*	6118	24.8%	3802703	17.6%
One family and no others: Married couple households :All children non-dependent	1004	4.1%	1297454	6.0%
One family and no others: Cohabiting couple households: No children	334	1.4%	1022898	4.7%
One family and no others: Cohabiting couple households: With dependent children	604	2.4%	701552	3.2%
One family and no others: Cohabiting couple households: All children non-dependent	21	0.1%	70001	0.3%
One family and no others: Lone parent households: With dependent children	2941	11.9%	1399939	6.5%
One family and no others: Lone parent households: All children non-dependent	1028	4.2%	663547	3.1%
Other households: With dependent children	2584	10.5%	484067	2.2%
Other households: All student	33	0.1%	84277	0.4%
Other households: All pensioner	110	0.4%	88785	0.4%
Other households: Other	1017	4.1%	784745	3.6%
All households	24676	100.0%	21660475	100.0%

Source 2001 Census

6.4 Summary

This demographic information reveals three important features of the project area:

The ICSDP area has a younger than average population (particularly those under 30 years old) compared with the average for England and Wales.

The ICSDP area has an extremely large minority ethnic population (70% minority ethnic) compared with the average for England and Wales (8.7%).

The ICSDP area has a higher than average proportion of lone parents with dependent children, compared to the average for England and Wales.

These three factors will have implications for any initiative that is planned within this project. Any future initiatives or consultations should consider this population type, particularly as there may be specific needs relevant to this population. Any community consultations should incorporate a sample similar to that described in the tables in this section.

The following provides a brief list of arising factors which might influence future initiatives:

- the proportion of the population that understand English;
- the types of media they read/listen to;
- the facilities they regularly access;
- the facilities they need;
- educational requirements;
- travel habits.

It is recommended that particular attention is paid to the three groups of population mentioned above, and that consultation exercises are designed to ask questions in relation to the issues that might be important to them.

7 Religious affiliation

Table 7-1 shows the population of the project area and England & Wales by their religious affiliation, as stated on the census form. The largest single group, with 58.2% of the population, state their religion as Muslim, with Christian as the second biggest group (27.8%). Only 5% claimed no religion, which is only a third of the percentage for England as a whole.

Table 7-1 Religious affiliation

	ICSDP AREA		England & Wales	
People stating religion as:	**Number**	**%**	**Number**	**%**
Christian	21922	27.8%	37338486	71.7%
Buddhist	58	0.1%	144453	0.3%
Hindu	487	0.6%	552421	1.1%
Jewish	27	<0.1%	259927	0.5%
Muslim	45880	58.2%	1546626	3.0%
Sikh	822	1.0%	329358	0.6%
Other	75	0.1%	150720	0.3%
None	3922	5.0%	7709267	14.8%
Not stated	5671	7.2%	4010658	7.7%
All people	78864	100.0%	52041916	100.0%

Source 2001 Census

7.1 Summary

This majority Muslim population has implications for a number of wider issues. Different religious observance requirements might affect:

- travel patterns on different days for Muslims and Christians;
- the type of facilities needed in terms of places of worship;
- specific shopping requirements (e.g. food, clothes, books);
- educational requirements (religious education).

When future initiatives are planned it is essential that this major group of the population is catered for and considered.

8 Migration

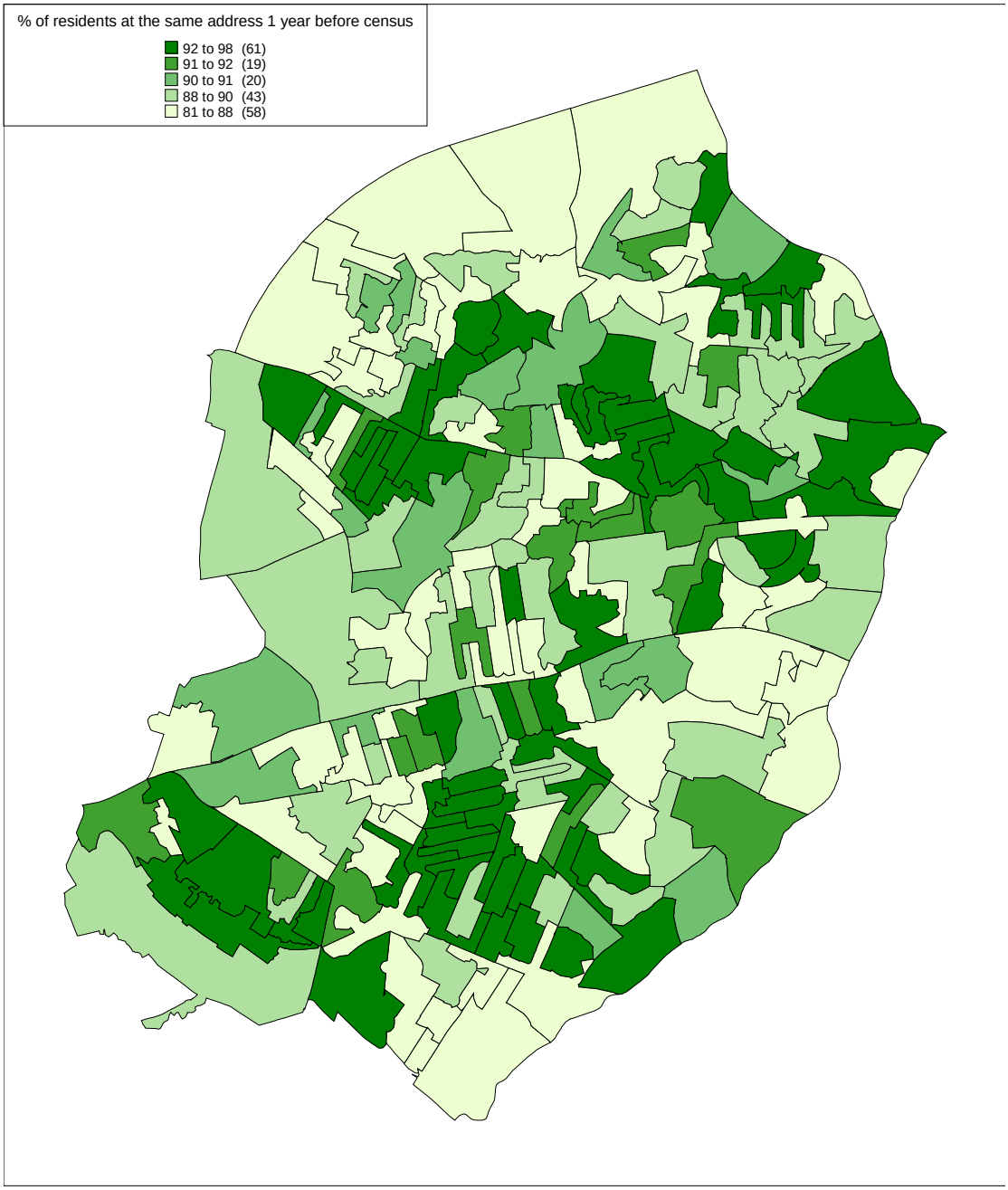
People change their address for a variety of reasons: Housing, Jobs, Partnerships, Family/Friends, Areas or Education. Table 8-1 shows the number of people in the project area by address one year before the census. 90% of people were living at the same address. 7.1% of residents lived at a different address within the associated area; the whole of Birmingham. In England and Wales. 88% of residents lived at the same address one year before the census.

Table 8-1 Migration

	ICSDP area	
	No	**% of residents, 2001**
Lived at the same address	71042	90.1%
No usual address one year ago	1148	1.5%
Lived elsewhere one year ago within same area	434	0.6%
Lived elsewhere outside the area but within the 'associated area'	5613	7.1%
Lived elsewhere outside the 'associated area' but within the UK	25	0.0%
Lived elsewhere outside the UK	605	0.8%
Moved out of area but within the 'associated area'	7624	n/a
Moved outside the 'associated area' but within UK	28	n/a

Figure 8-1 shows the percentage of residents in each Census Output Area (COA) that were living at the same address one year before the census. The darker areas show where a high percentage of residents were at the same address, and include areas around Saltely, Ward End and Bordersley Green. Areas with a lower percentage of residents at the same address include the COAs at the north west side of the project area.

Figure 8-1: Percentage of residents at the same address 1 year before census



Source www.statisitcs.gov.uk

Table 8-2 shows the changes of ownership by type and price in 2001 for the four wards and for England and Wales. 74% of all transactions in the four wards were terraced houses, compared to 32% in England and Wales. 4.4% of transactions were flats compared with 16% in England and Wales. This reflects the style of housing in the project area, which is 51% terraced, 25% semi-detached and 13% flats (see Section 14.3). The mean price for a terraced house in the area in 2001 was below £50,000, compared with £90,000 in England and Wales.

Table 8-2: Changes of ownership and dwelling price, 2001

Changes of Ownership by Dwelling Price, 2001	Nechells	Small Heath	Sparkbrook	Washwood Heath	England & Wales
Number of Household spaces, 2001 (Census)	9106	10781	9605	9754	22538641
Number of Transactions by Dwelling Type : Detached	10	3	4	6	292260
Number of Transactions by Dwelling Type : Flat	27	7	17	11	198448
Number of Transactions by Dwelling Type : Semi-detached	58	79	17	128	346308
Number of Transactions by Dwelling Type : Terraced	238	345	160	299	390659
Number of Transactions by Dwelling Type : Not Known	1	..	1	1	9044
Number of Transactions by Dwelling Type : Total Sales	334	434	199	445	1236719
Sales/Household spaces	3.7%	4.0%	2.1%	4.6%	5.5%
Type of Sale : Cash	96	124	67	156	292176
Type of Sale : Mortgage	238	310	132	289	944543
Type of Sale : Cash as Percentage of All Sales	28.7%	28.6%	33.7%	35.1%	23.6%
Price Indicators for All Dwellings : 2 Percentile	20,350	18,102	18,000	20,000	19,000
Price Indicators for All Dwellings : Lower Quartile	35,000	40,000	36,500	36,500	58,500
Price Indicators for All Dwellings : Median	45,000	47,000	45,000	45,000	90,000
Price Indicators for All Dwellings : Upper Quartile	60,000	57,963	56,000	56,250	14,3500
Price Indicators for All Dwellings : 98 Percentile	103,000	97,550	90,000	90,156	41,4000
Price Indicators for All Dwellings : Mean	52,158	50,197	47,137	47,295	119,436
Price Indicators by Dwelling Type : Detached - Median	90,500	..	..	64,000	142,000
Price Indicators by Dwelling Type : Detached - Mean	114,945	..	..	63,167	178,806
Price Indicators by Dwelling Type : Flat - Median	47,000	31,000	28,500	31,000	90,000
Price Indicators by Dwelling Type : Flat - Mean	45,061	28,786	30,776	36,768	120,184
Price Indicators by Dwelling Type : Semi-detached - Median	60,000	59,000	55,000	54,000	81,950
Price Indicators by Dwelling Type : Semi-detached - Mean	65,941	62,704	60,321	55,553	101,733
Price Indicators by Dwelling Type : Terraced - Median	41,250	45,000	45,000	43,000	68,500
Price Indicators by Dwelling Type : Terraced - Mean	47,050	46,881	46,945	43,895	89,499
Number of Outliers : < £1000	0	0	0	0	162
Number of Outliers : < £10000	1	1	0	1	3555
Number of Outliers : > £20m	0	0	0	0	5

Source www.statistics.gov.uk

9 Travel

9.1 Car/Van ownership

The ownership of cars and vans per household was included as a question on the 2001 census. The number of cars or vans per household is shown in Table 9-1. Almost half of the households in the project area do not have a car or van.

Table 9-1: Car/van ownership

Number of cars or vans in households*	ICSDP AREA		England & Wales	
	Number	%	Number	%
None	11701	47.5%	5802183	26.8%
One	10519	42.7%	9486366	43.8%
Two	2084	8.5%	5095959	23.5%
Three	278	1.1%	976438	4.5%
Four or more	81	0.3%	299529	1.4%
All households	24654	100.0%	21660475	100.0%
Mean cars/vans per household	0.64	n/a	1.11	n/a
Mean cars/vans per resident aged 16 – 74	0.32	n/a	0.64	n/a

Source www.statistics.gov.uk
*Includes any company car or van when available for private use. ** 'All cars or vans in area' only those cars and vans owned by, or available for use by, households This count is not exact as households with more than 10 or vans are counted as having 10 cars or vans.

Figure 9-1 shows the percentage of households without a car or van. The darker colours indicate a higher percentage of households without a car or van. Over 50% of households do not have a car in the North-east of the project area, between Washwood Heath and Alum Rock Road do not have a car or van.

Figure 9-1: % of households without a car or van

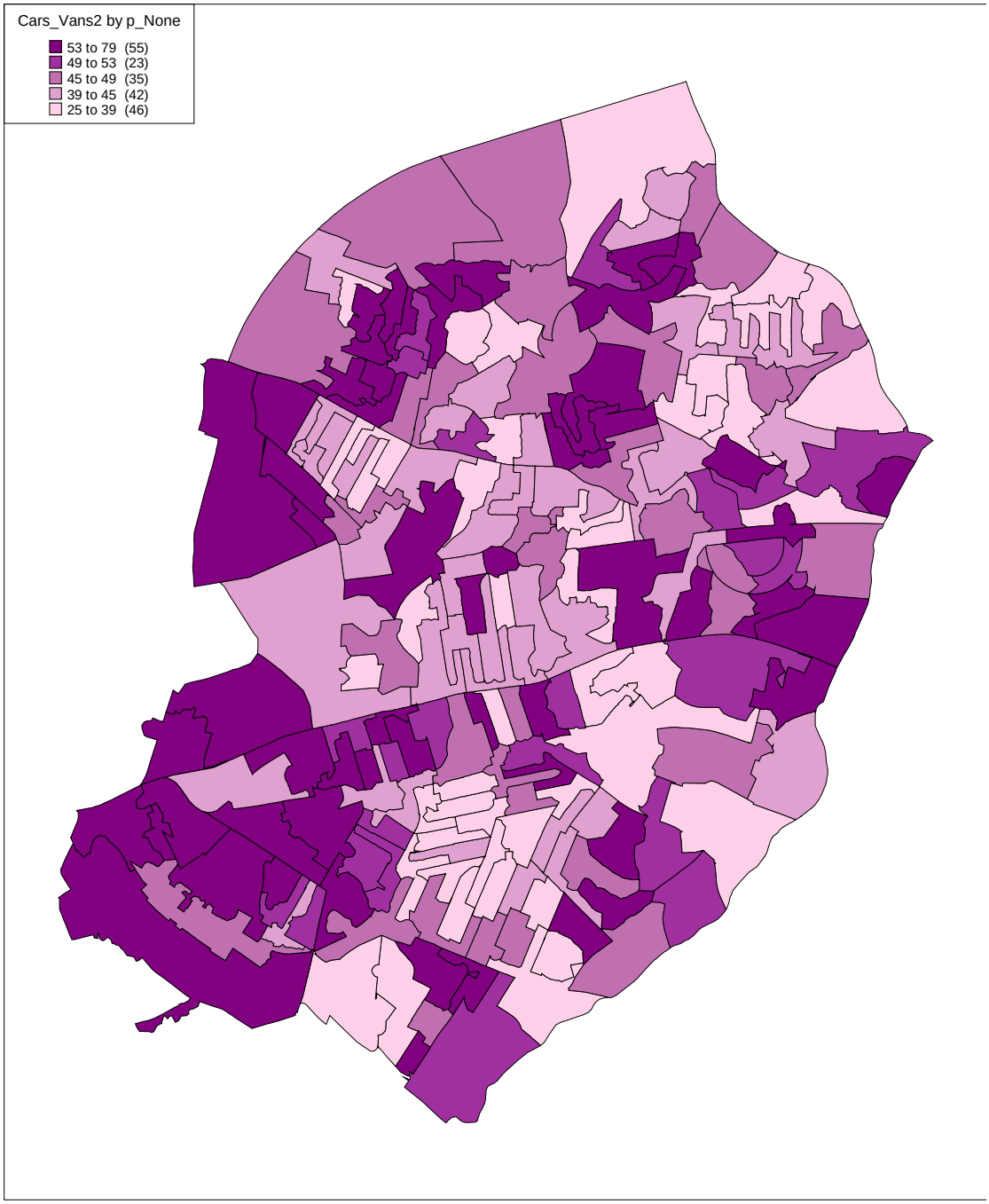
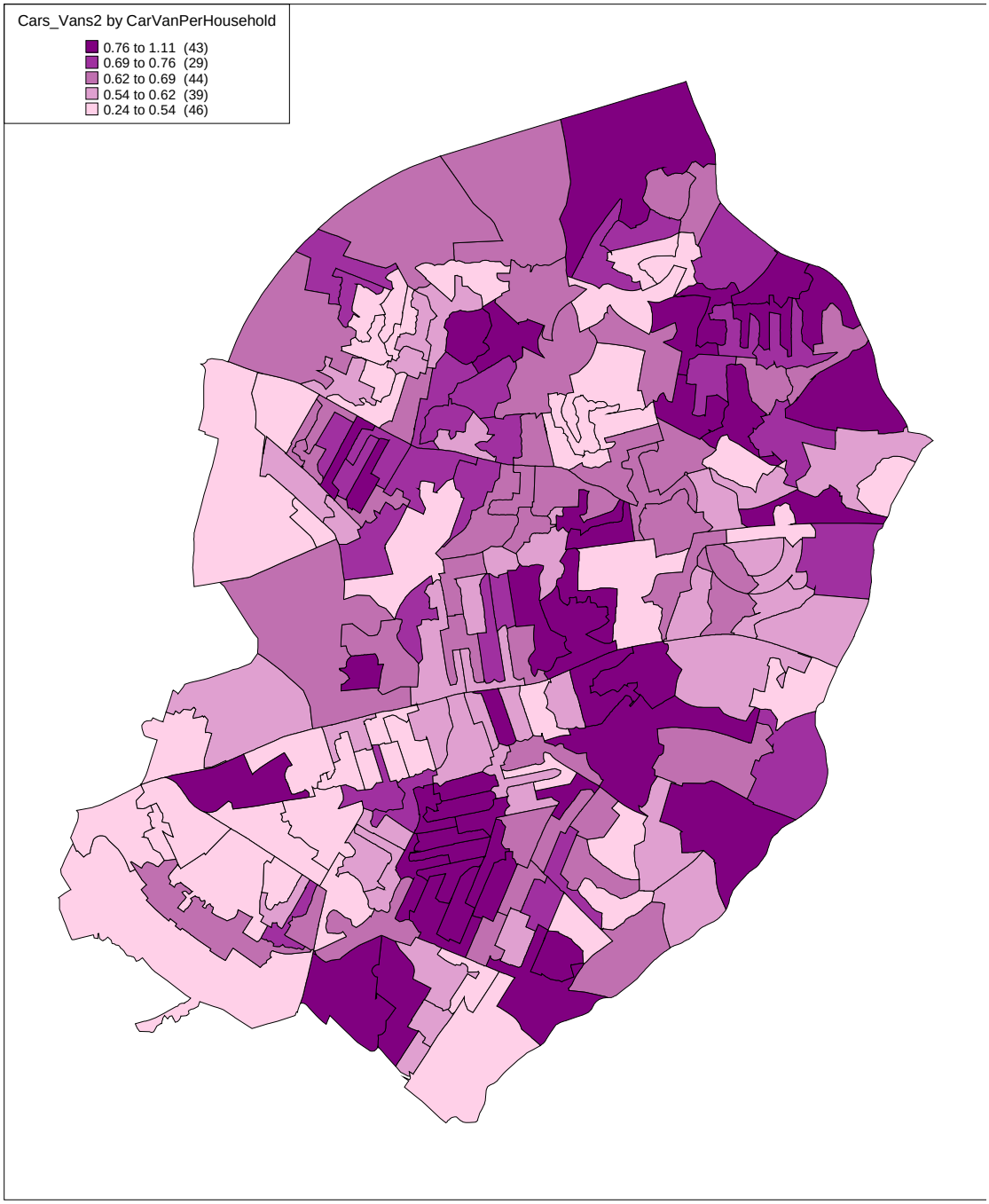


Figure 9-2 shows the average number of cars and vans per household. The area between Bordersley Green and Small Heath has between 0.8 and 1.1 cars per household

Figure 9-2: Average cars and vans per household by COA



The large number of unlicensed cars observed parked on the road during the attitude survey or mentioned by the residents surveyed suggests that this may be an under-estimate of the actual car availability. People with unlicensed vehicles will probably not have admitted to ownership on the census form. It is proposed that Police data be sought on this issue.

9.2 Travel to work

Table 9-2 shows how people travel to work for people who live in the project area, people who work in the project area, and for England and Wales. There is high percentage of residents of the project area who travel to work by bus, 26%, compared with 16% of people who work in the area, and 7.4%

for England and Wales. Travelling to work by car is high for those working in the project area, but is lower for residents of the area.

Table 9-2: Travel to work

People aged 16 - 74 in employment who usually:-	Residents in ICSDP COAs		People who work within ICSDP Area		England & Wales	
	Number	%	Number	%	Number	%
work mainly at or from home	1488	8.0%	1488	5.7%	2170547	9.2%
travel to work by: Underground; metro; light rail; Tram	30	0.2%	47	0.2%	710083	3.0%
travel to work by: Train	183	1.0%	326	1.2%	964642	4.1%
travel to work by: Bus; Mini Bus or coach	4807	25.7%	4072	15.5%	1747683	7.4%
travel to work by: Motorcycle; Scooter; moped	96	0.5%	167	0.6%	258344	1.1%
travel to work by: Driving a car or van*	8064	43.2%	15880	60.5%	13050529	55.2%
travel to work by: Passenger in a car or van	1317	7.1%	1528	5.8%	1477211	6.3%
travel to work by:Taxi or minicab	235	1.3%	167	0.6%	122478	0.5%
travel to work by: Bicycle	214	1.1%	313	1.2%	650977	2.8%
travel to work by: On foot	2170	11.6%	2199	8.4%	2364633	10.0%
travel to work by: Other**	71	0.4%	53	0.2%	110627	0.5%
All people aged 16-74 in employment	18675	100.0%	26239	100.0%	23627754	100.0%
Public transport users in households# With car or van##	2485	13.3%	-	-	2361906	10.0%
Public transport users in households# Without car or van##	2556	13.7%	-	-	1041777	4.4%

Source 2001 Census

Notes: ** Excludes working at home; no fixed place of work; working at offshore installation; working outside UK

. # For the purposes of this table; public transport is defined as Underground; metro; light rail or tram; train; and bus minibus or coach.

The final two rows show the number of people who travel to work by public transport who live in a household with/without car or van.

Data on travel to school will be available from the Young TransNet programme. This is discussed in Section 10.3.

9.3 Summary

The travel data obtained from the Census statistics has shown that there are specific issues that BCC must tackle and consider throughout this project.

Less than half of the ICSDP area population (47.5%) own or have access to a car or van (compared with 26.8% in England and Wales). This means that over half are reliant on non-car modes of transport.

Washwood Heath and Alum Rock Road experience some of the lowest levels of car ownership.

There is a higher proportion than average of residents travelling to work by bus (25.7%, compared with 7.4% in England and Wales). The attitude survey showed that while most bus services were judged to be good, there were some services which were perceived as unreliable, especially in the evenings.

These findings indicate a strong need to concentrate future initiatives on non-car modes of transport, particularly the bus, and particularly those services running to the North East of the project area, where there are many jobs (see section 11). It may be that there is already a good public transport system in place to the North East of the project area because there is a strong need, however this may be to the detriment of other parts, and so an analysis of public transport services should be undertaken and reviewed throughout the term of the project. The impact of introducing new services should also be examined, including physical and psychological changes.

It was anticipated that accessibility planning information would be available from BCC, but there have been delays in validating the data and the software. TRL has also asked for data on public transport usage from Centro via BCC, but this has not yet been made available. This data should be used to expand upon the issues covered in this section.

10 Education

10.1 Schools

Schools are an important focus of community life. Adult learning is also important for giving people a chance to develop new skills and to find employment.

Table 10-1 and Table 10-2 show the primary and secondary schools within the project area. Although only 28% of the population claim to be Christian (see Section 7) there are a 4 Roman Catholic Schools and 1 Church of England school in the area, with 1,647 pupils in total. This suggests that there may be significant numbers of children travelling into the area from outside. There may also be travel from the project area to schools outside the area. This will have implications for the modes used to travel to school (see Section 9), congestion and parking near these schools.

There is only one school in the area which offers education up to the age of 18, Washwood Heath Technical college. This suggests those pupils aged 16-18 have to travel further to school, and that 16-18 year olds may go to establishments outside of the project area to continue with their education. The post-16 staying-on rate is part of the index of multiple deprivation.

At most of the schools in the area, a high number of pupils speak an additional language; at ten out of the 22 primary schools and two out of six secondary schools more than 90% of pupils speak an additional language. Pupils with special educational needs (SEN), with or without a full statement account for 7.5% of primary and 7.7% for secondary, which are both much lower than the average for Birmingham and England.

Table 10-3 shows the performance of primary schools in 2003.The average points score of children at Key Stage 2 (end of primary) is included in the index of multiple deprivation. Three quarters of the schools had a lower KS2 score than the England average. The KS1-KS2 value added measure for a school is based on the improvement of pupils between KS1 and KS2, compared to the median improvement of pupils with similar KS1 results. A value near 100 indicates similar improvement to the median; a higher number indicates a better improvement.

All of the primary schools have a higher percentage of pupils eligible for free school meals than for the average for England.

Table 10-4 shows the performance of the secondary schools within the project area. Average points score of children at Key Stage 4 (GCSE/GNVQ) is lower than for the England average for all of the secondary schools except Bordersley Green Girls School. This school also has low unauthorised absence, which is much higher at Holy Trinity RC and Waverley secondary school. The KS4 value added measure is greater than 100 for all secondary schools, which shows that the pupils have made progress in line with or better than the median improvement from KS3 for pupils at a similar level.

The average points score at Key Stage 3 and Key Stage 4 and the secondary school absence rates are all included in the index of multiple deprivation. Also included is the proportion of young people not staying in education above 16, and the proportion of people under 21 not entering Higher education.

Table 10-1: Primary Schools within ICSDP area

	Postcode	Age range	Type	Pupils aged 4+	full SEN*	SEN no stat.	free meals	add. Lang	Perm excl	Temp excl.
Marlborough Infants	B10 9NY	4-7		270	1	8	39.1%	99.5%	0	0
Sladefield Infants	B8 2TJ	4-7		360	2	21	32.3%	73.2%	0	0
St Benedicts Infants	B10 9DP	4-7		449	0	68	44.1%	98.1%	0	0
Highfield J & I	B8 3QF	4-11		822	7	46	53.1%	96.1%	0	0
St Saviours C of E Primary	B81JP	4-11	CE	277	7	20	48.5%	98.7%	0	3
Adderley Primary	B8 1DZ	4-11 & NC		487	6	12	46.8%	94.2%	0	11
Alston Primary	B9 5UN	4-11 & NC		637	4	20	60.1%	63.4%	1	6
Bordesley Green Primary	B9 5XX	4-11 & NC		625	13	12	40.1%	83.7%	0	10
Holy Family Catholic Primary	B10 0HT	4-11 & NC	RC	209	1	19	24.0%	24.1%	0	0
Leigh Junior Infant and Nursery	B8 2YH	4-11 & NC		437	2	29	38.0%	88.2%	0	2
Parkfield Primary	B8 3AX	4-11 & NC		571	8	63	47.1%	96.4%	0	0
Regents Park Community Primary	B10 0NJ	4-11 & NC		417	7	26	49.8%	85.8%	0	0
Rosary Catholic Primary	B8 3SF	4-11 & NC	RC	331	4	10	37.8%	46.1%	0	0
Shaw Hill Primary	B8 3AN	4-11 & NC		420	10	30	42.0%	97.3%	0	0
Somerville Primary	B10 9EN	4-11 & NC		651	7	70	41.6%	97.8%	0	0
St Cuthberts RC J & I	B8 2PS	4-11 & NC	RC	223	1	2	34.5%	3.3%	0	0
Starbank Primary	B10 9LR	4-11 & NC		628	12	56	55.7%	85.1%	0	0
Ward End	B8 2RA	4-11 & NC		430	5	10	49.3%	42.7%	0	0
Wyndcliffe (NC) J (Merged school)	B9 5BG	4-11 & NC		651	11	30	55.1%	77.9%	0	0
Thornton Junior	B8 2LQ	7-11		482	13	20	33.7%	67.5%	0	15
Marlborough Junior	B10 9NY	7-11		359	7	35	44.6%	98.0%	1	1
Oldknow Junior	B10 0HU	7-12		548	11	23	46.6%	97.1%	0	0
England		4-11			1.6%	16.1%	17.3%	11.0%	0.03%	
West Midlands		4-11			1.5%	15.7%	19.0%	13.4%	0.03%	
Birmingham		4-11			1.7%	16.4%	33.1%	34.9%	0.04%	

Source: BCC, DfES

Table 10-2: Secondary Schools within ICSDP area

	Postcode	Age range	Type	Pupils aged 11+	full SEN*	SEN no stat.	free meals	add. Lang	Perm excl	Temp excl.
Bordesley Green Girls	B9 4TR	11-16		603	9	23	55.8%	95.3%	0	0
Holy Trinity RC	B10 0AX	11-16	RC	607	10	65	54.7%	33.3%	0	33
Park View	B8 3HG	11-16		567	10	44	62.7%	95.6%	2	92
Saltley Secondary	B9 5RX	11-16		921	7	52	57.7%	66.4%	2	0
Waverley Secondary School	B10 9BT	11-16		639	14	76	55.5%	81.1%	5	75
Washwood Heath Technology College	B8 2AS	11-18		1380	18	37	46.1%	67.5%	1	37
England		11-18			2.4%	13.5%	14.3%	8.8%	0.23%	
West Midlands		11-18			2.6%	13.3%	15.8%	10.4%	0.21%	
Birmingham		11-18			2.2%	14.4%	31.5%	28.8%	0.24%	

Source: BCC, DfES

Note: information on free meals and English as additional language are percentage of pupils, averaged over 3 years

Table 10-3: Primary school performance, 2003

				KS1-KS2 Value Added		
	average KS2 point score	% authorised absence	% unauthorised absence	School VA measure	School VA coverage indicator*	School VA stability indicator**
Adderley Primary	23.1	6.1%	0.9%	97.1	93%	90%
Alston Primary	26.3	6.4%	2.1%	99.8	93%	79%
Bordesley Green Primary	25.5	5.4%	2.8%	99.3	91%	92%
Highfield J & I	25.3	8.4%	1.1%	99.1	90%	92%
Holy Family Catholic Primary	26.8	6.9%	~	99.8	100%	96%
Leigh Junior Infant and Nursery	26.9	4.5%	0.6%	103.2	84%	77%
Marlborough Infants	n/a	n/a	n/a	n/a	n/a	n/a
Marlborough Junior	23.7	5.90%	0%	100	91%	n/a
Oldknow Junior	23.0	6.40%	0.40%	97	93%	n/a
Parkfield Primary	25.0	7.7%	0.2%	98.9	92%	87%
Regents Park Community Primary	27.0	5.90%	~	100.7	82%	92%
Rosary Catholic Primary	27.0	7.30%	0.9%	98.3	90%	86%
Shaw Hill Primary	24.3	5.80%	0.2%	98.5	98%	88%
Sladefield Infants	26.3	6.10%	0.9%	99.8	84%	74%
Somerville Primary	25.0	8.20%	0.1%	100.9	88%	95%
St Benedicts Infants	n/a	n/a	n/a	n/a	n/a	n/a
St Cuthberts RC J & I	29.7	5.30%	0.00%	100.1	100%	94%
St Saviours C of E Primary	27.9	9.20%	0.10%	99.4	96%	81%
Starbank Primary	24.7	5.90%	1.40%	100	90%	83%
Thornton Junior	29.4	6.30%	0.50%	101.6	94%	n/a
Ward End	25.4	8.80%	0.30%	99.1	92%	67%
Wyndcliffe (NC) J (Merged school)	n/a	n/a	n/a	n/a	n/a	n/a
England	27.4	5.08%	0.41%			

Source: BCC, DfES

Table 10-4: Secondary school performance, 2003

				KS3 to GCSE Value Added			
	Average GCSE/GNVQ point score per 15 year old pupil - capped	**% authorised absence**	**% unauthorised absence**	**KS3-GCSE/GNVQ value added measure**	**Coverage indicator***	**Average number of GCSE/GNVQs taken by VA 15 year old pupils**	**Stability indicator ****
Bordesley Green Girls	36.2	7.5%	0.1%	107.3	99.%	10	99%
Holy Trinity RC	32.9	6.6%	2.8%	101.9	94%	9.8	99%
Park View	27.0	8.5%	1.2%	104.1	93%	8.8	99%
Saltley Secondary	29.5	8.6%	1.2%	103.9	93%	10.4	98%
Washwood Heath Technology College	27.9	9.0%	0.9%	100.8	95%	9.7	98%
Waverley Secondary School	28.8	10.4%	3.1%	105.0	96%	9.8	98%
England	34.8	6.93%	1.14%				

Source: BCC, DfES

* - % of 15 year olds included in KS3-GCSE/GNVQ VA calculation

** - % of 15 year old pupils in the same school for both KS3 and GCSE/GNVQs

10.2 Qualifications

Table 10-5 shows the number of people aged 16 to 74 by highest qualification for the project area and England & Wales. A similar statistic - the proportion of adults aged 25 to 54 with no qualifications is included in the index of multiple deprivation. In the project area, 52% of people aged 16 to 74 had no qualifications, compared with only 29% in England and Wales. Of those people with qualifications, the percentage of people at each level was similar, but with slightly less people qualified to level 4/5 (ie First degree; Higher degree; NVQ levels 4 and 5; HNC; HND; Qualified Teacher Status; Qualified Medical Doctor; Qualified Dentist; Qualified Nurse; Midwife; Health Visitor). There may be people in the area who have qualifications from another country, which may not be easily categorised into the categories given on the Census form.

Table 10-5: Highest qualifications

People aged 16 – 74 with:	ICSDP AREA		England & Wales	
	Number	%	Number	%
No qualifications	25964	52.2%	10937042	29.1%
Highest qualification attained level 1*	6990	14.1%	6230033	16.6%
Highest qualification attained level 2**	6727	13.5%	7288074	19.4%
Highest qualification attained level 3***	2877	5.8%	3110135	8.3%
Highest qualification attained level 4/5#	4734	9.5%	7432962	19.8%
Other qualifications/level unknown	2435	4.9%	2609192	6.9%
All people aged 16 - 74	49727	100.0%	37607438	100.0%

Source: Census 2001

* 1+ 'O' level passes; 1+ CSE/GCSE any grades; NVQ level 1; Foundation GNVQ.

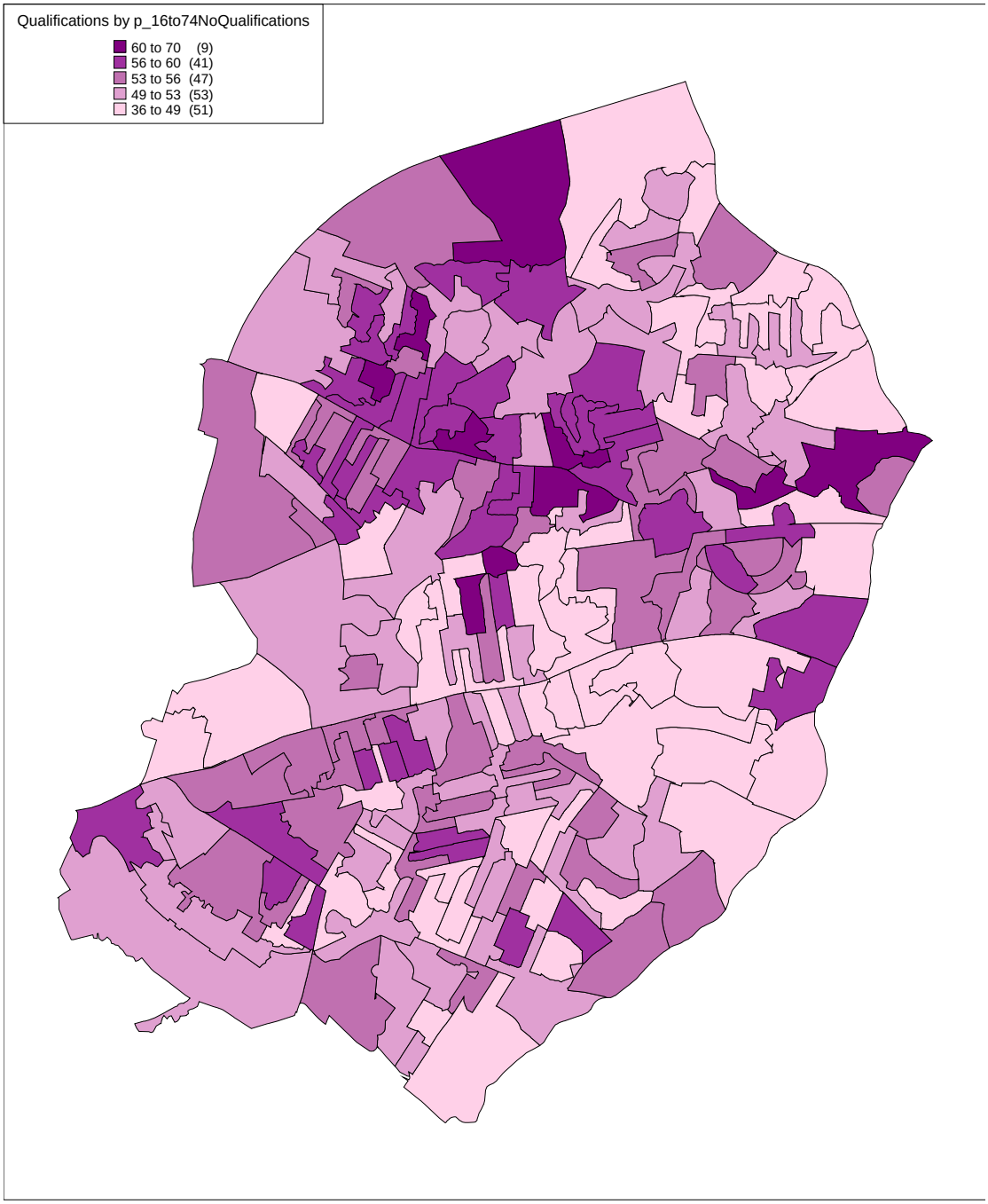
** 5+ 'O' level passes; 5+ CSEs (grade 1's); 5+ GCSEs (grades A-C); School Certificate; 1+ 'A' levels/'AS' levels; NVQ level 2; Intermediate GNVQ.

*** 2+ 'A' levels; 4+ AS levels; Higher School Certificate; NVQ level 3; Advanced GNVQ.

First degree; Higher degree; NVQ levels 4 and 5; HNC; HND; Qualified Teacher Status; Qualified Medical Doctor; Qualified Dentist; Qualified Nurse; Midwife; Health Visitor.

Figure 10-1 shows the percentage of people aged 16 to 74 with no qualifications by COA. The lightest coloured band indicates areas with between 36 and 49% of the people have no qualification, which is higher than for the England and Wales average. The areas that have low percentages of unqualified people include a large area at the east of the project area, near to East Birmingham hospital. There are nine COAs with more than 60% of people with no qualifications, mainly in the north-west of the project area.

Figure 10-1: % of people aged 16 – 74 with no qualifications



10.3 Travel to school

Young TransNet data will provide a valuable resource once more schools are signed up. At present data is only available for 4 schools in 2003/04 (3 primary and one secondary) in the ICSDP area.

Both the number of schools taking part, and the results from each school need to be tracked throughout the project, using 2004/05 as a baseline. Basic data is available on the YoungTransnet website, but if possible raw data should be used so that the responses can be linked together, for example to link method of travel with distance – is it the pupils who live the closest who walk to school, and who accompanies them.

The Safer Routes to School programme with which Young TransNet is associated may also have data in the future.

Data is available on:

- Journeys to school – how pupils travel to school
- Preferred journeys to school
- Distances to school
- Who accompanies to school – friends, adults
- Car ownership among parents/carers
- Bike ownership and public transport passes

On the Young TransNet website, percentage of respondents in each category is available for each school, which can be separated by year group and year of survey.

Because of the limited number of schools signed up in 2003/04 only a few general tables using data available on the website are included below.

At least two thirds of pupils at the three primary schools walked to school, the remainder mostly going by car. Washwood Heath Technology College, which is the only school in the area offering education for pupils up to 18 years old, has 38% of its pupils arriving by bus, and only 27% walking as pupils live further away from the school. The data on who accompanied pupils will be much more useful if linked to the other questions since if a child travels by car they cannot be unaccompanied.

Table 10-6: Young TransNet 2003/04 - How pupils travel to school

School	Number of participants	Walk	Cycle	School Bus	Other Bus	Train	Car	Other
Parkfield Primary	401	68%	0%	0%	0%	0%	31%	0%
Somerville Primary School	530	76%	0%	0%	0%	0%	23%	0%
St. Saviour's C.E. Primary	207	71%	0%	0%	1%	0%	27%	0%
Washwood Heath Technology College	542	27%	1%	7%	38%	0%	26%	1%

Source Young TransNet

Table 10-7: Young TransNet 2003/04 - Distance pupils travel to get to school

School	0-1km	1-2km	2-3km	3-5km	Above 5km
Parkfield Primary	66%	19%	10%	3%	2%
Somerville Primary School	79%	17%	2%	0%	1%
St. Saviour's C.E. Primary	88%	7%	2%	2%	1%
Washwood Heath Technology College	28%	30%	20%	11%	11%

Source Young TransNet

Table 10-8: Young TransNet 2003/04- Who accompanies pupils on their way to school

School	Alone	With Friends	With Adult	With Friends and Adult
Parkfield Primary	6%	29%	19%	46%
Somerville Primary School	20%	31%	17%	33%
St. Saviour's C.E. Primary	11%	27%	22%	41%
Washwood Heath Technology College	35%	37%	17%	11%

Source Young TransNet

The Attitude survey suggested that there were formal and informal catchment areas of schools, resulting in ethnic majorities at some schools. This may mean children do not attend their nearest school. Residents were also asked if they would allow a child to walk to school alone, to which 59% of respondents said 'No'.

10.4 Summary

A high number of pupils at schools in the area speak an additional language, and a high percentage of pupils are eligible for free school meals.

Performance in KS2 is lower than average for three quarters of the primary schools in the area, and for KS4, all schools except Bordersley Green Girls School have a lower average school than the England average. Unauthorised absence is high in some schools in the area.

52% of the population aged 16 to 74 in the project area have no qualifications, and in nine census output areas, over 60% of people do not have any qualifications.

There is only one school in the area which offers education for pupils up to 18 years (Washwood Heath Technology College), which implies pupils have to travel further to continue their education, or go to schools outside of the project area. The post-16 staying-on rate is part of the index of multiple deprivation.

Young TransNet will be a useful source of data on travel to school, and the number of schools taking part needs to be monitored. There were four schools that took part in 2003/04. The results from the surveys will be much more useful if raw data can be used so that the questions can be linked together. Basic data is available from the website: http://www.youngtransnet.org.uk/portal/birmingham.asp

Education data is available on the national statistics website (www.statistics.gov.uk), and data for individual schools from the Department for Education and skills (http://www.dfes.gov.uk/performancetables/)

11 Employment

11.1 Socio-Economic classification

The National Statistics Socio-economic Classification (NS-SEC) measures employment relations and conditions of occupation. It differentiates between employers and employees, and also includes categories for people who do not work.

Table 11-1 shows the NS-SEC for the project area and for England and Wales, and is shown graphically in Figure 11-1. 21% of people aged 16 to 74 in the project area have never worked, compared with 3% in England and Wales. A smaller percentage of people in the project area are in the top four categories (Large employers –Intermediate operations). Of those people who do work in the project area, half are semi routine or routine operations, compared with 30% in England and Wales. 11% of people in the project area aged 16-74 are full time students.

Table 11-1: Socio-economic classification

	ICSDP AREA		England & Wales	
People aged 16-74:	**Number**	**%**	**Number**	**%**
Large employers and higher managerial occupations	504	1.0%	1289207	3.4%
Higher professional occupations	802	1.6%	1893407	5.0%
Lower managerial and professional occupations	3416	6.9%	6990083	18.6%
Intermediate occupations	2652	5.3%	3532894	9.4%
Small employers and own account workers	2351	4.7%	2626067	7.0%
Lower supervisory and technical occupations	2556	5.1%	2687927	7.1%
Semi-routine occupations	6710	13.5%	4393965	11.7%
Routine occupations	5409	10.9%	3410122	9.1%
Never worked	10266	20.6%	1021800	2.7%
Long-term unemployed*	1296	2.6%	382388	1.0%
Full-time students**	5296	10.7%	2648992	7.0%
Not classifiable for other reasons***	8469	17.0%	6730586	17.9%
All people aged 16 - 74	49727	100.0%	37607438	100.0%

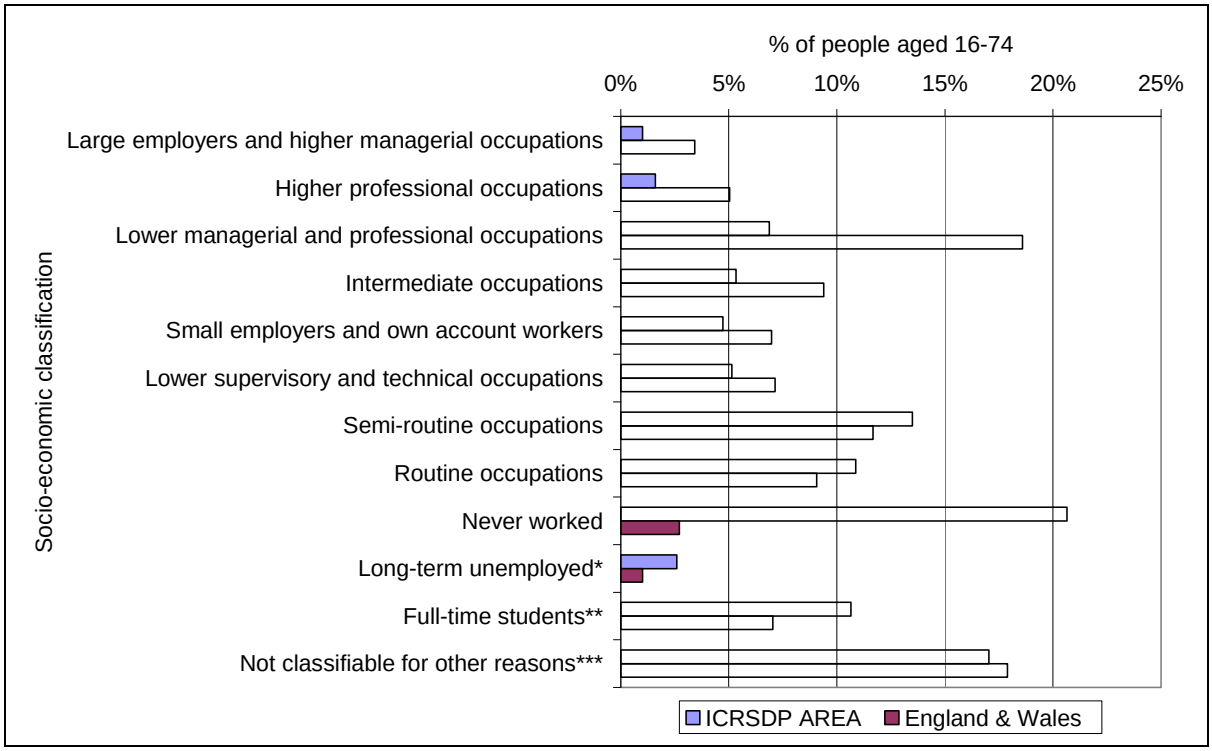
Source: National statistics, www.statstics.gov.uk

Notes: * For long-term unemployed year last worked is 1999 or earlier.

** In the NS-SeC classification; all full time students are recorded in the 'full-time students' category regardless of whether they are economically active or not.

*** 'Not classifiable for other reasons' includes people whose occupation has not been coded.

Figure 11-1: Socio-economic classification



11.2 Businesses in the area

Table 11-2 shows the numbered of VAT registered local units by enterprise group for the four wards. Nechells ward is a large ward that extends from the project area towards the city centre, and has a large number of local units. In the four wards of the project area, approximately two thirds of the businesses are production, retail and property and business services. Production accounted for 20% of enterprises, compared with 12% in Birmingham and 8% in England and Wales. The largest enterprise group in Sparkbrook was production (26%), Property and Business Services in Nechells (34%) and Retail in Small Heath (23%) and Washwood Heath (31%).

Table 11-2: Number of local units by enterprise group, March 2004

	Nechells	Small Heath	Spark brook	Washwood Heath	All Four Wards		Birmingham		England & Wales	
					No	%	No	%	No	%
Agriculture	..	..	..	..	..		70	0%	104180	6%
Production	450	85	280	30	845	20%	3160	12%	147880	8%
Construction	95	40	55	20	210	5%	2005	8%	169700	9%
Motor Trades	90	20	75	20	205	5%	1015	4%	70425	4%
Wholesale	235	45	125	25	430	10%	1865	7%	114265	6%
Retail	160	130	125	110	525	12%	4490	17%	245870	14%
Hotels & Catering	115	30	80	25	250	6%	1810	7%	132125	7%
Transport	70	15	20	10	115	3%	800	3%	65970	4%
Post & Telecomm.	40	15	10	10	75	2%	435	2%	21280	1%
Finance	20	10	10	5	45	1%	580	2%	30065	2%
Property & Business Services	785	100	185	45	1115	26%	6785	26%	474540	26%
Education	35	15	25	15	90	2%	645	2%	41310	2%
Health	35	15	25	10	85	2%	595	2%	32460	2%
Public Admin & Other Services	155	35	70	30	290	7%	2140	8%	170050	9%
TOTAL	2285	555	1085	355	4280	100%	26395	100%	1820120	100%

Source: Neighbourhood statistics

Table 11-3 shows the number of local units by the number of employees. There is a higher percentage of local units in the project area that employ more than 20 people. Large employers in the area include Birmingham Children's Hospital and Aston University in Nechells, Birmingham Heartlands Hospital in Small Heath, Alstom Transport Ltd and LDV Ltd (both transport manufacturers) in Washwood Heath

Table 11-3: Number of local units by persons employed, March 2004

Persons Employed	Nechells	Small Heath	Spark brook	Washwood Heath	All Four Wards		Birmingham		England & Wales	
					No	%	No	%	No	%
0-4	1290	355	585	205	2435	57%	15710	60%	1215495	67%
5-9	360	90	205	55	710	17%	4560	17%	275655	15%
10-19	270	50	135	40	495	12%	2670	10%	155135	9%
20+	360	60	155	55	630	15%	3395	13%	170350	9%
TOTAL	2280	555	1080	355	4270	100%	26335		1816635	100%

Source: Neighbourhood statistics

Figure 11-2 shows the number of people aged 16-74 who work in each COA (Census Output Area). These people may live outside of the ICSDP area. The figures include people who usually work from home. This shows that there are large numbers of jobs at the north west and west side of the project area, and in the east of the area, where there is a hospital.

Figure 11-2: Number of people aged 16 – 74 by COA of workplace

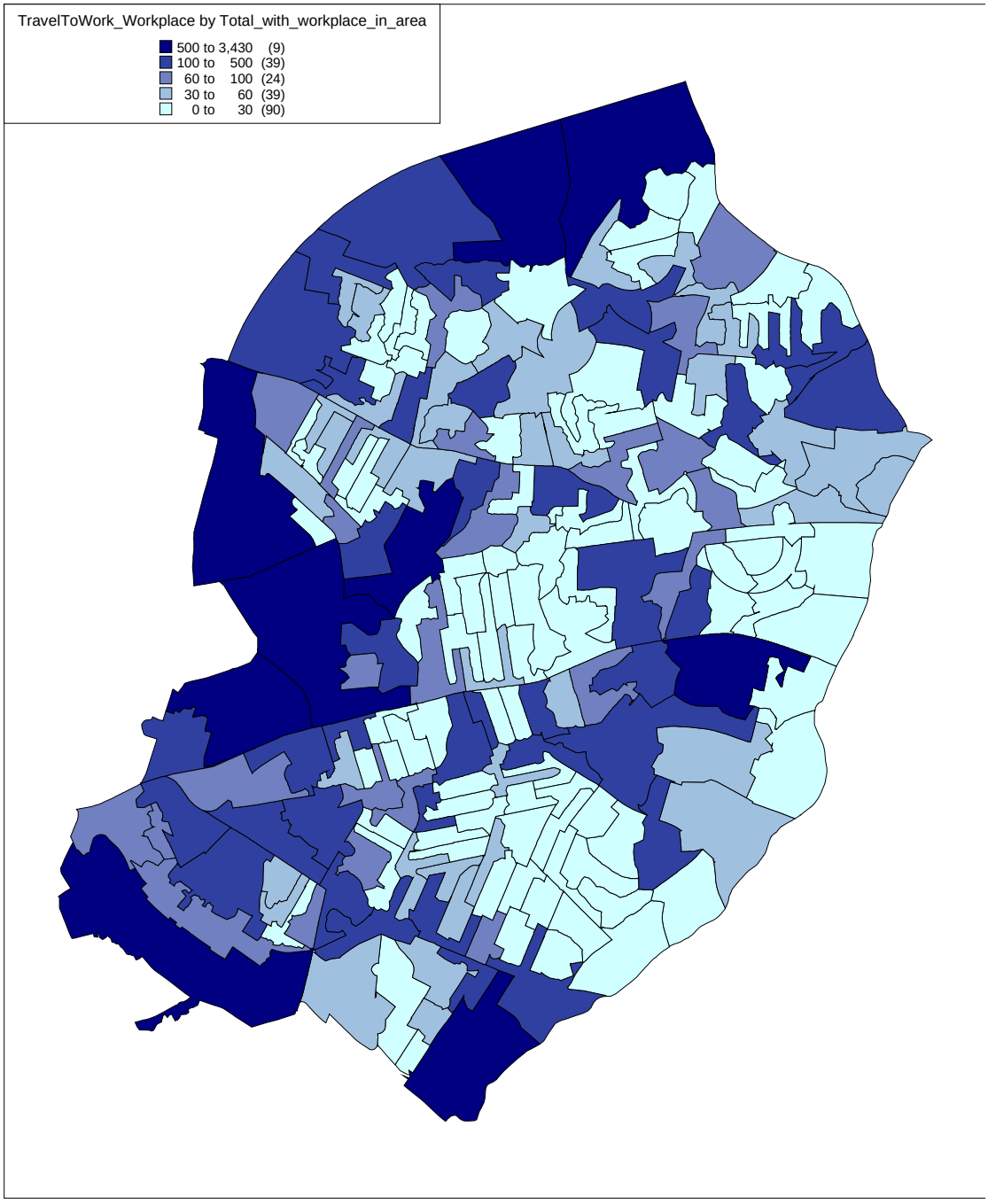
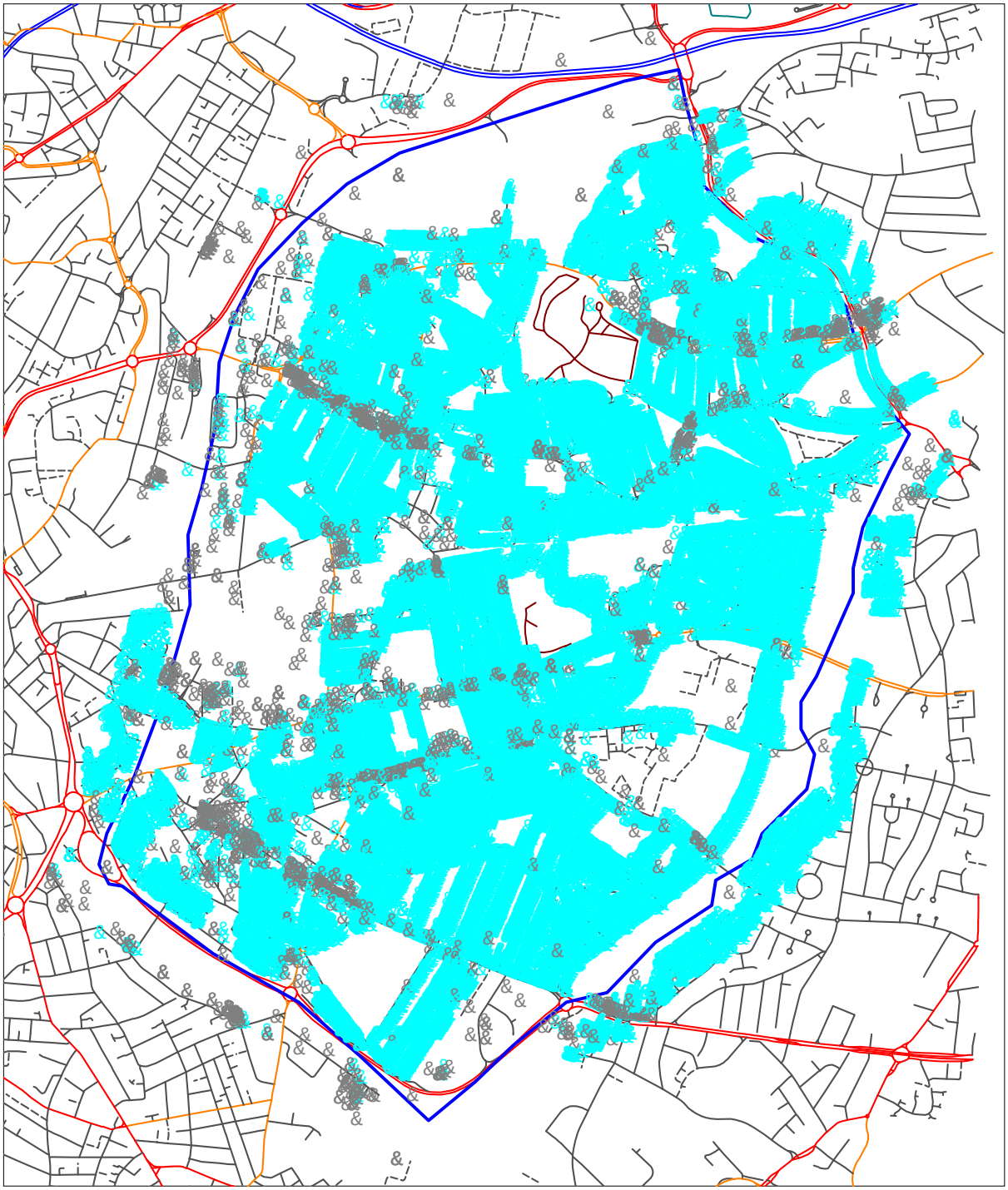


Figure 11-3 shows a map of the area with addresses colour coded as residential (blue) and non residential (grey), which includes schools. This also shows the roads which are local shopping areas.

Figure 11-3: Residential/Non residential addresses



11.3 Income Support

Income support is available for people aged 16-59 on a low income and low savings, either working less than 16 hours per week on average, and those not required to be available for work, for example lone parents, sick and disabled people. The number of Adults and Children in Income Support households is an indicator for deprivation (see Section 16)

Table 11-4 shows the number of claimants by wards for the wards of the project area, and for England and Wales. In England and Wales, 11.5 % of people aged 16-59 receive income support, compared with between 23% and 32% in the four wards of the project area. For England and Wales, 35% of claimants were male, compared with 41% in the four wards.

Table 11-4: Income support claimants, 2002

					Four Wards		England & Wales	
	Nechells	**Small Heath**	**Spark brook**	**Washwood Heath**	**No**	**% of claimants**	**No**	**% of claimants**
All people aged 16-59 (census 2001)	16285	18865	15401	14940	65491	n/a	30695652	n/a
All Claimants Total	4055	4430	4855	4330	17670	100%	3530687	100%
% of people claimants	24.9%	23.5%	31.5%	29.0%	27.0%	n/a	11.50%	n/a
Claimants Aged Under 20	90	50	90	50	280	2%	65309	2%
Claimants Aged 20-29	730	600	630	645	2605	15%	456812	13%
Claimants Aged 30-39	840	830	855	840	3365	19%	620771	18%
Claimants Aged 40-49	585	625	715	610	2535	14%	450981	13%
Claimants Aged 50-59	405	500	610	485	2000	11%	383360	11%
Claimants Aged 60 and over	1410	1825	1955	1695	6885	39%	1553454	44%
Male Claimants	1490	1855	2245	1735	7325	41%	1236863	35%
Female Claimants	2565	2570	2605	2595	10335	58%	2292303	65%
Claimants gender Unknown	0	5	5	5	15	0%	1521	0%

Source: Neighbourhood statistics

11.4 Working families' tax credit

Working Families' Tax Credit is awarded by the Inland Revenue, and was introduced on 5 October 1999, replacing Family Credit. It is a tax credit available to:

Families - either couples (married or unmarried) or lone parents who meet all the following conditions:

- At least one adult is in paid work for at least 16 hours per week;
- One or more children under the age of 16 (or under 19 in full-time education up to A-level or equivalent standard) is living with them;
- The family is resident in the UK and entitled to work there;
- The family has savings of less than £8000.

Adults and children in working Families Tax Credit households make up a part of the index of multiple deprivation. Table 11-5 shows the number of claimants for the four wards. Between 35% and 41% of families with dependant children in the four wards claim this benefit, compared with 19% of families in England and Wales. 35% of claimants in the area were aged less than 30 and 62% had child aged less than five, compared with 22% and 41% respectively in England and Wales, which is likely to be due to the young nature of the population compared with England and Wales (see Section 6.1)

Table 11-5: Working families' tax credit claimants, 2002

	Nechells	Small Heath	Spark Brook	Washwood Heath	Four Wards		England & Wales	
					Total	% of claimants	Total	% of claimants
Number of households with dependent children (census 2001)	4046	5454	4289	4204	17993	n/a	6387674	n/a
All Claimants Total	1465	1940	1510	1720	6635	100%	1178967	100%
% of households with dependent children	36.2%	35.6%	35.2%	40.9%	36.9%	n/a	18.5%	n/a
Claimants Aged Under 30	520	685	545	585	2335	35%	260418	22%
Claimants Aged 30-39	605	755	595	745	2700	41%	547303	46%
Claimants Aged 40-49	240	345	235	265	1085	16%	280908	24%
Claimants Aged 50 and over	30	50	45	40	165	2%	39072	3%
Claimants Age Unknown	75	105	90	75	345	5%	51266	4%
Claimants who were Single	435	315	280	380	1410	21%	614997	52%
Claimants who were part of a Couple	1030	1625	1230	1335	5220	79%	563970	48%
Male Claimants	230	340	250	275	1095	17%	207699	18%
Female Claimants	1240	1600	1255	1445	5540	83%	971268	82%
Total number of reckonable children	3595	4930	3835	4250	16610	n/a	2318525	n/a
Claimants with a Youngest Child Aged Under 5	890	1185	990	1055	4120	62%	481818	41%
Claimants with a Youngest Child Aged 5-10	355	495	340	425	1615	24%	399431	34%
Claimants with a Youngest Child Aged 11-15	175	200	135	190	700	11%	235010	20%
Claimants with a Youngest Child Aged 16-19	45	60	40	55	200	3%	62708	5%

Source: Neighbourhood statistics

11.5 Job seekers' allowance

Jobseeker's Allowance (JSA) replaced Unemployment Benefit and Income Support for unemployed people on 7 October 1996. It is payable to people under pensionable age who are available for, and actively seeking, work of at least 40 hours a week. Certain groups of people, including carers and those with a physical or mental condition, are able to restrict their availability to less than 40 hours depending upon their personal circumstances.

In addition, to be entitled to JSA the person must:

- be in Great Britain;
- be capable of work;
- not be in relevant education;
- be working less than 16 hours a week on average.

The number of adults and children in Job Seekers Allowance households is included in the index of multiple deprivation. The number of Job seekers' allowance claimants for the four wards is shown in Table 11-6. In Sparkbrook ward, 11.3% of people aged 16-59 claim Job seekers allowance, compared with only 2.7% in England and Wales.

Table 11-6: Job seekers' allowance claimants, 2001

	Nechells	Small Heath	Spark brook	Washwood Heath	England & Wales
All people aged 16-59	16285	18865	15401	14940	30695652
All Claimants Total	1340	1400	1735	1275	817265
% of people aged 16-59	8.2%	7.4%	11.3%	8.5%	2.7%
All Claimants With Benefit	1285	1335	1675	1200	748343
Contribution And Income Based Claimants	70	65	80	65	39920
Contribution Based Only Claimants	110	100	90	100	131195
Income Based Only Claimants	1100	1170	1505	1035	577228
No Benefit In Payment Claimants	60	70	60	75	68922
All Income Based Claimants	1170	1235	1585	1100	617148
Income Based Claimants Aged Under 20	160	150	195	140	73275
Income Based Claimants Aged 20-29	440	490	585	400	198449
Income Based Claimants Aged 30-39	295	320	425	270	157871
Income Based Claimants Aged 40-49	180	180	260	175	107460
Income Based Claimants Aged 50 and over	105	90	130	110	80093
Total No of Dependants of Income Based Claimants	605	915	870	800	195915
Dependents of Income Based Claimants Aged Under 5	230	340	355	310	65597
Dependents of Income Based Claimants Aged 5-10	220	305	275	265	63662
Dependents of Income Based Claimants Aged 11-15	115	185	160	160	43791
Dependents of Income Based Claimants Aged 16 - 19	40	85	85	65	22865

Source: Neighbourhood statistics

11.6 Summary

A fifth of people in the project area aged between 16 and 74 have never worked, compared with 3% in England and Wales. Of those who do work, half work in routine or semi routine occupations. There are lower percentages of people in managerial occupations.

The businesses in the area are mainly production, retail and property & business services

For the four wards, 27% of residents claim income support, and 37% of families claim working families' tax credit. 62% of the latter claimants have a child under 5.

Counts of enterprises and local units by industry group and size are also available from neighbourhood statistics (www.neighbourhood.statistics.gov.uk). The information on benefit claimants is available at the neighbourhood statistics website, from national to ward level. The data available is a snapshot of a given year, and should be available annually.

12 Crime

The nature of deprived areas means they often face higher than average crime rates. Crime has been recognised as both a symptom and a cause of deprivation, and form part of the index of multiple deprivation. People's perception of crime is also important, and people's perception of an area may alter with a change in crime rates.

Crime data was available for financial years 2001/02 to 2003/04. For data protection reasons, the data was only available aggregated by crime type for each COA. Table 12-1 shows the number of crimes by year and crime type. The largest group was 'Other crime' which accounted for 19% of crimes. This includes dangerous driving, perverting the course of justice and many other crimes. 'Criminal damage' and 'violence against the person' both accounted for 15% of the crimes.

Table 12-1: Crimes in project area COAs by year and crime type

Crime type	2000/01	2001/02	2002/03	2003/04	Total	%
Arson	238	344	171	112	865	2.0%
Burglary (dwelling)	834	791	747	502	2874	6.6%
Burglary (other)	931	808	720	537	2996	6.8%
Criminal Damage	1758	1837	1651	1671	6917	15.8%
Drug Crime (other)	270	310	313	219	1112	2.5%
Drug Crime (trafficking)	28	46	114	34	222	0.5%
Theft from motor vehicle	1300	1453	1310	867	4930	11.3%
Theft of motor vehicle	1026	1053	975	954	4008	9.2%
Other motor vehicle crime	132	169	133	95	529	1.2%
Other crime	1858	2102	2196	1987	8143	18.6%
Robbery	446	508	474	450	1878	4.3%
Sexual offences	71	82	81	90	324	0.7%
Theft from shop or stall	314	348	385	395	1442	3.3%
Theft from the person	235	232	221	147	835	1.9%
Violence against the person	1478	1762	1668	1797	6705	15.3%
Total	10919	11845	11159	9857	43780	100.0%

Source: BCC

Table 12-2 shows the percentage of recorded crimes by crime type for England and Wales in 2002/03. Note that the categories for the crime types are slightly different from those in the above table. In England and Wales, 40% of recorded crimes were 'theft and handling stolen goods'

Table 12-2: Recorded crime: by type of offence, England and Wales 2002/03

Offence group	% of crimes
Theft and handling stolen goods	40
Of which: Theft of vehicles	5
Of which: Theft from vehicles	11
Criminal damage	19
Burglary	15
Violence against the person	14
Fraud and forgery	6
Drugs offences	2
Robbery	2
Sexual offences	1
Other offences	1
All notifiable offences (=100%) (thousands)	5,899

Source: Home Office

Figure 12-1 shows average crimes over the four year period per 100 residents of each COA. There are five COAs which had more than 60 crimes per year per 100 residents, which are not clustered in one area. The Bordersley Green area has a low number of crimes per resident.

Figure 12-2 is a figure produced by the West Midlands Joint Data Team showing the distribution of street crime. There are several areas with high street crime: Around Coventry road in the south east of the area, and at the east of the area near Stetchford lane (A4040). The Coventry Road area also had a low score on the street audit of personal safety (Very unsafe - See Section 5)

Other data that needs to be considered include people's perception of crime, and vehicle offences, such as speeding, driving without a licence, insurance or tax. The Attitude survey showed that people think that crime is a huge problem in the area, and fears may influence the journeys they make, and that vehicle crimes such as speeding, illegal parking and untaxed vehicles are also problems.

Crime data is available from the neighbourhood statistics website, (www.neighbourhood.statistics.gov.uk), and also from the Home Office (http://www.homeoffice.gov.uk) and West Midlands Police (http://www.west-midlands.police.uk)

Figure 12-1: Total crimes 2000/01-2003/04 by COA

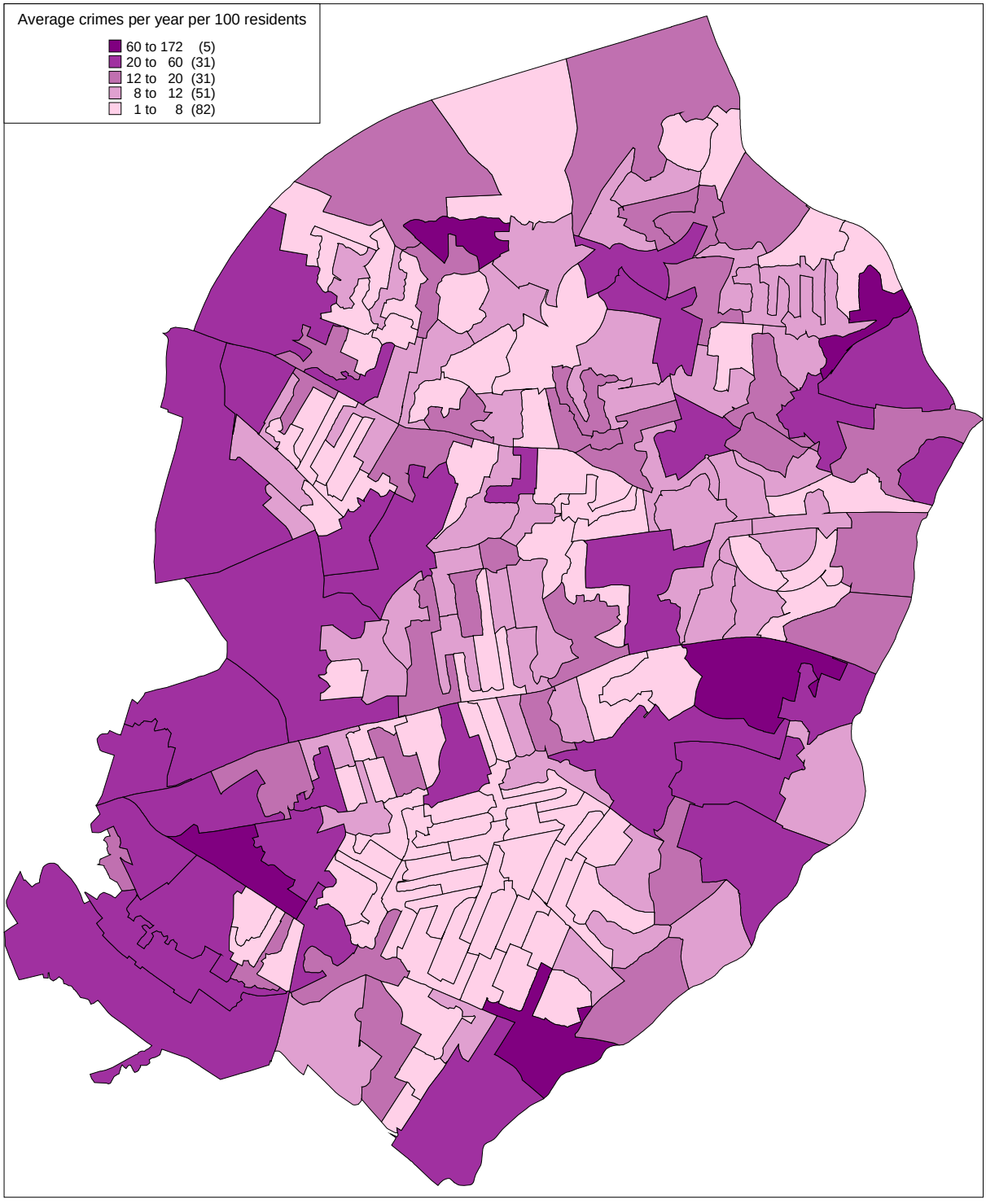
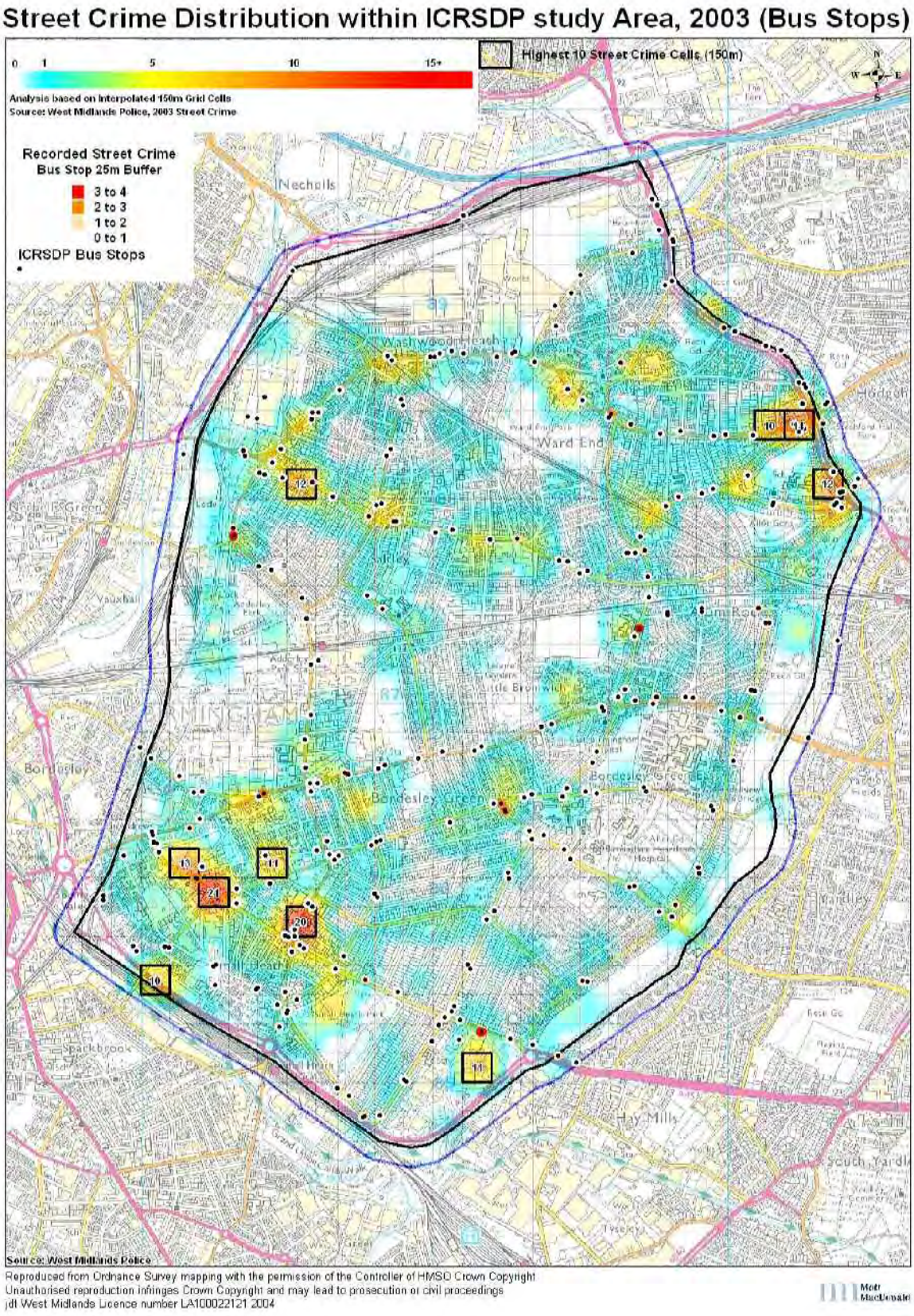


Figure 12-2: Street crime distribution, 2003



13 Accidents

Personal Injury Accident data was obtained from BCC for March 1998-February 2004. This consists of data for the attendant circumstances, any vehicles involved, and injured casualties. Image files of the front page of the accident report were also obtained, so that additional details of individual accidents can be obtained such as a sketch of the vehicle and pedestrian movements.

The population of the inner city area is relatively small for accident analysis, even when using more than one year's accident data. Injury indicators other than the Stats19 record will be needed to supplement the number of accidents and casualties reported to the police. This will enable us to have a good chance of detecting where true changes in casualty numbers have occurred, especially for individual road user groups where the numbers of casualties will be quite small.

Other data from the police or hospital accident records will also be needed by BCC, such as accompaniment of child casualties and use of seat belts, cycle lights and helmets.

There are several possibilities for a control area for accidents. Other wards in Birmingham could be used, the whole of Birmingham, or similarly deprived areas in another city (see Section 2.8 and Section 4).

The accident records also contained causation factors and the driver and casualty postcodes, which were matched against the average grid reference for all addresses within each postcode.

13.1 Accident Matching

It is known from previous work that not all accidents and casualties are reported to the police. In particular, child pedestrian accidents may not be reported as road accidents to the police. This means that the Stats19 record is an underestimate of the true risk of injury in an area, or to a particular road user group.

In order to gain a better estimate of risk of injury, hospital accident and emergency data needs to be used to supplement the police data. This requires the Stats19 records to be matched with hospital records, which is not a simple undertaking. TRL have had experience of accident matching, (Stone 1984; Simpson 1996 and Broughton et al 2001), and the general method is shown in Figure 13-1 and described below.

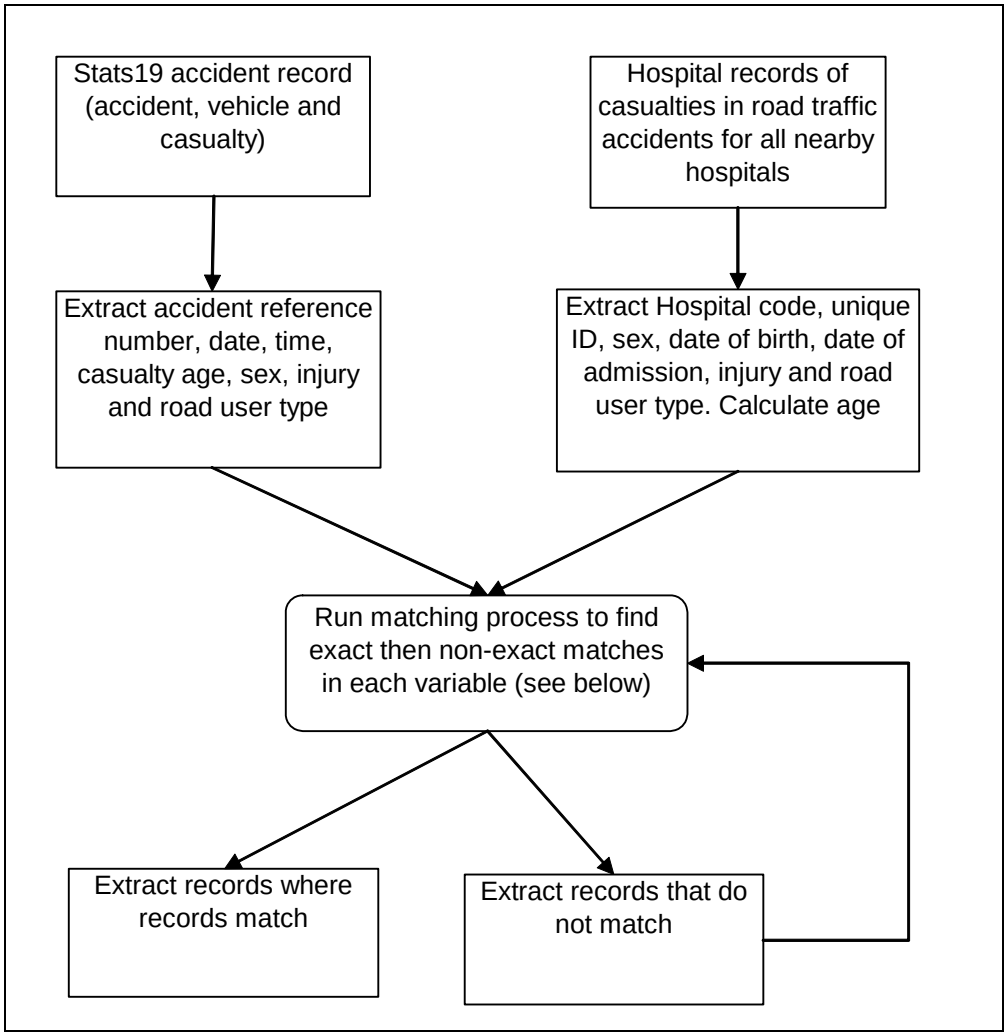
The initial data required are the Stats19 accident records (comprising accident, vehicle and casualty records) and hospital records of casualties injured in road traffic accidents. Hospital records are needed from all hospitals in the area which a casualty may attend in the event of an accident. The Stats19 records from all areas from which the nearby hospitals receive casualties are needed for the matching. None of the data contains personal information of the casualty such as name, so the records need to be matched on several variables.

The records from all data sets that are needed for matching need to be extracted. These are date, time, road user type, casualty, age, sex and injury. Casualty age is calculated exactly from the hospital records from date of birth and date of admission, and is only an estimate on Stats19, so may not match exactly, similarly, the casualty injury may have been coded incorrectly on the Stats19 record, or the casualty may not have attended hospital until the day after the accident. There may be other variables which are recorded locally, but not part of Stats19 which may also be useful, for example, to which hospital a casualty was taken.

For the first matching process, an exact match is required for all variables. The accidents which do not match are then matched a second time, but this time allowing one variable a tolerance level, for example, requiring exact matches for all variables except allowing the date to be plus or minus one day. When each single variable has been tested with a tolerance level, the tolerance can be increased, or the variables tested in combinations.

The matched records can then be assembled, with added details of the casualty from the hospital record such as length of stay and details on injuries. The unmatched hospital records then need to be matched with the project area to give unreported accidents in the project area.

Figure 13-1: Flow chart for accident matching



13.2 Casualties in the project area

Table 13-1 shows the number of casualties between March 1999 and February 2004 (5years) by mode of travel and casualty injury for children (aged less than 16) and adults. There were 16 fatalities: 3 child pedestrians, 7 adult pedestrians and 6 adult car occupants. Pedestrians and cyclists accounted for 23% of all casualties, and children made up 19% of all casualties. In 2003 on built-up roads in Great Britain, 25% of casualties were pedestrians or cyclists, and 13% were children.

Table 13-1: Number of casualties March 1999-Feb 2004 in project area by mode, injury and age

Casualty mode	Killed		Seriously injured		Slightly injured		Total	% of total
	Child	Adult	Child	Adult	Child	Adult		
Pedestrian	3	7	50	60	230	194	554	20.7%
Pedal cycle	0	0	3	8	28	31	71	2.7%
Powered two-wheelers (PTW)	0	0	0	16	2	67	86	3.2%
Car	0	6	4	78	168	1521	1832	68.4%
Bus or coach	0	0	0	2	6	71	86	3.2%
LGV	0	0	0	0	1	31	32	1.2%
HGV	0	0	0	0	1	2	3	0.1%
Other	0	0	0	0	0	12	12	0.4%
Total	3	13	57	164	436	1929	2676	100.0%

Note: Total includes unknown ages

Figure 13-2 shows all accidents March 1999-Feb 2004, plotted by severity. This shows the large number of accidents occurred along the B-roads through the area (coloured yellow or orange on the map), and the A-road at the south of the Area

Figure 13-2: Accidents in the project area, March 1999- Feb 2004

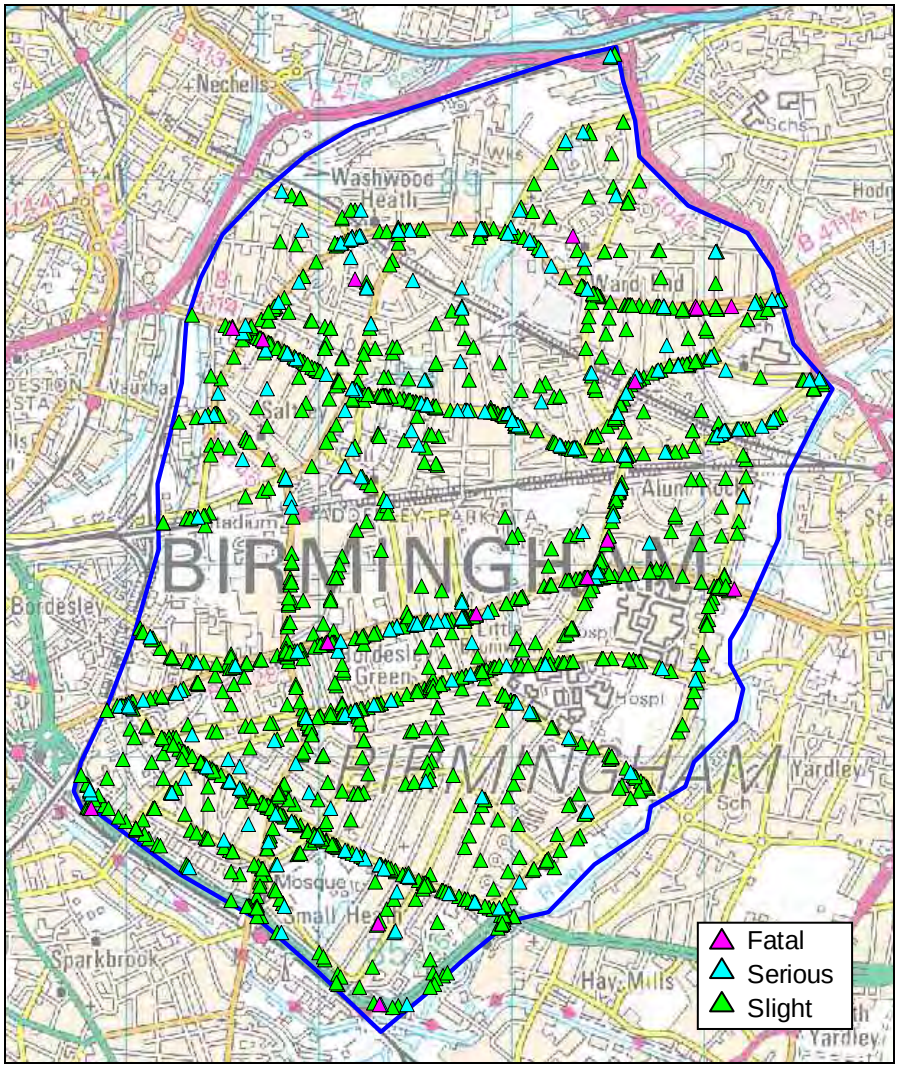


Figure 13-3 shows a grid density analysis for the accidents in the project area, using 150m grid squares. High accident density areas are shown as red. This again highlights the high density of accidents on the B-roads, especially at junctions.

Figure 13-3: Grid density analysis of accidents March 1999- Feb 2003

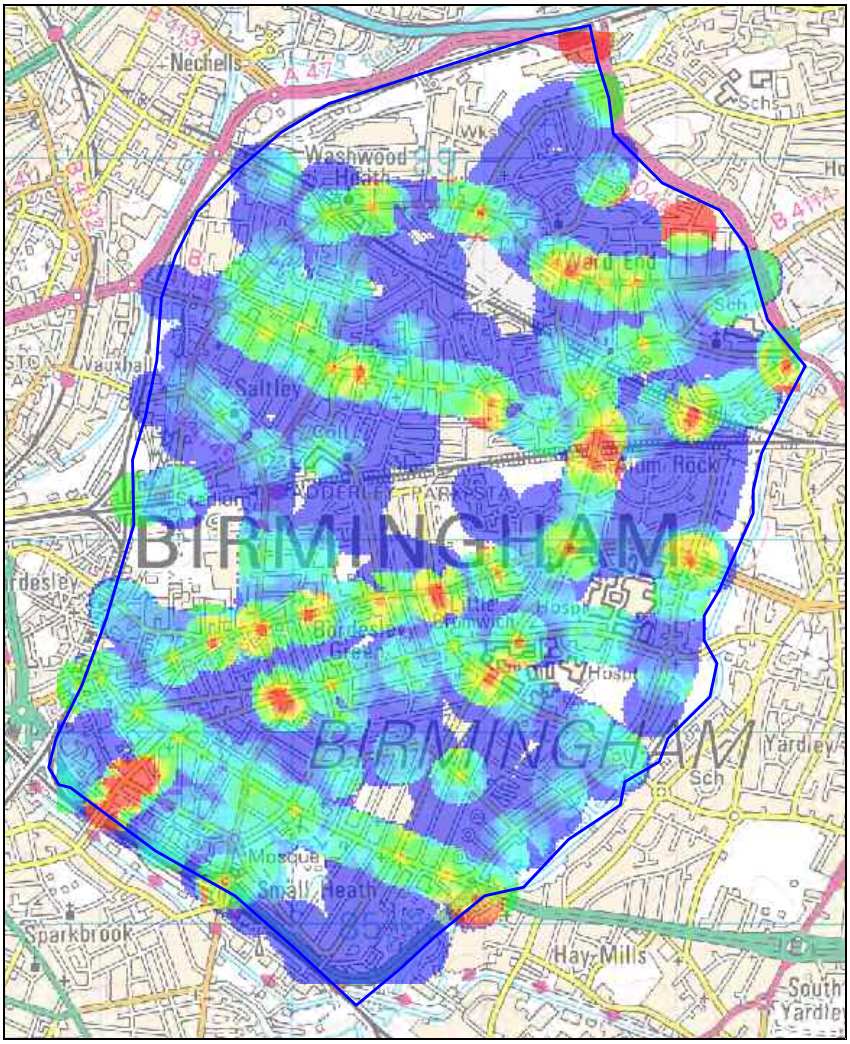


Table 13-2 shows the number of accidents and casualties in the area by year, which shows the increase in slight casualties from 480 in 2000 to 560 in 2003; this is likely to be the result of increased traffic in the area.

Table 13-2: Accidents and casualties by year

	Accident severity				Casualty injury			
	Fatal	Serious	Slight	Total	Killed	Seriously injured	Slightly injured	Total
1999 (10 months)	2	31	213	246	2	37	293	332
2000	3	49	332	384	3	56	480	539
2001	3	30	356	389	3	33	518	554
2002	3	47	344	394	3	59	500	562
2003	5	32	401	438	5	33	560	598
2004 (2 months)	0	3	59	62	0	4	87	91
Total	16	192	1705	1913	16	222	2438	2676

Table 13-3 shows casualties by year by user group. The injuries amongst vehicle occupants, both children and adults has increased greatly between 2000 and 2003.

Table 13-3: Casualty types by year

	Pedestrian		Driver/Passenger		Total
	Child	Adult	Child	Adult	
1999 (10 months)	44	46	26	216	332
2000	62	55	39	383	539
2001	68	57	59	370	554
2002	60	43	65	394	562
2003	55	48	76	419	598
2004 (2 months)	4	12	12	63	91
Total	293	261	277	1845	2676

Table 13-4 shows the number of accidents by severity and vehicle types and level of pedestrian involvement. 30% of accidents involved only one vehicle. Overall, the most common combinations were 2 cars, no pedestrian, which accounted for 43% of accidents, of which 5% were fatal or serious; and single car plus pedestrian, which accounted for 23% of accidents, of which 21% were fatal or serious.

Table 13-4: Accidents by severity for vehicle and pedestrian combinations

	Fatal	Serious	Slight	Total	% of Total
Total single vehicle accidents	13	116	445	574	30%
Car, no pedestrian	4	15	48	67	4%
Non car, no pedestrian	0	3	19	22	1%
Car, pedestrian	6	84	349	439	23%
Non Car, pedestrian	3	14	29	46	2%
Total 2 vehicle accidents	1	61	1067	1129	59%
2 cars, no pedestrian	1	29	794	824	43%
2 car, pedestrian	0	6	15	21	1%
Other 2 vehicles, no pedestrian	0	26	253	279	15%
Other 2 vehicles, pedestrian	0	0	5	5	0%
Total 3 vehicle accidents	2	11	156	169	9%
no pedestrian	1	10	148	159	8%
pedestrian	1	1	8	10	1%
Total 4 vehicle accidents	0	3	30	33	2%
Total 5 vehicle accidents	0	1	6	7	0%
Total 6 vehicle accidents	0	0	1	1	0%
Total	16	192	1705	1913	100%

Table 13-5 shows the number of casualties by junction detail. Half of pedestrians and three quarters of vehicle occupants injured were at junctions; mostly at T-junctions, but also at roundabouts and private drives.

Table 13-5: Casualties by junction detail

	Pedestrian		Driver/Passenger		Total	% of total
	Child	Adult	Child	Adult		
Not at or within 20m of junction	167	113	93	452	825	30.8%
Roundabout	6	21	13	154	194	7.2%
T-junction /crossroads	109	111	157	1126	1503	56.2%
Private drive/entrance	11	16	12	97	136	5.1%
Other junction			2	16	18	0.7%
Total	293	261	277	1845	2676	100.0%

Two thirds of casualties were involved in accidents in daylight, as shown in Table 13-6. Table 13-7 shows the number of casualties by time of day. Two thirds of child pedestrian casualties were injured between 2pm and 8pm.

Table 13-6: Casualties by lighting conditions

Lighting condition	Pedestrian		Driver/Passenger		Total	% of total
	Child	Adult	Child	Adult		
Daylight	241	167	187	1153	1748	65.3%
Darkness, street lights lit	50	93	87	686	916	34.2%
Darkness, street lights unlit	1			1	2	0.1%
Darkness, no street lights	1	1		3	5	0.2%
Darkness, street lighting unknown			3	2	5	0.2%
Total	293	261	277	1845	2676	100.0%

Table 13-7: Casualties by time of day

Time of day	Pedestrian		Driver/Passenger		Total	% of total
	Child	Adult	Child	Adult		
0-2		7	4	80	91	3.4%
2-4	1	2	5	42	50	1.9%
4-6		2		39	41	1.5%
6-8	1	2	4	56	63	2.3%
8-10	27	17	17	117	178	6.7%
10-12	14	26	15	114	169	6.3%
12-14	27	42	27	228	324	12.1%
14-16	72	41	43	282	438	16.4%
16-18	64	35	53	268	420	15.7%
18-20	55	37	62	255	409	15.3%
20-22	24	30	31	186	271	10.1%
22-24	8	20	16	178	222	8.3%
Total	293	261	277	1845	2676	100.0%

Figure 13-4 shows the number of pedestrian casualties by time of day for adults and children, weekdays and weekends.

Figure 13-4: Pedestrian casualties by time of day

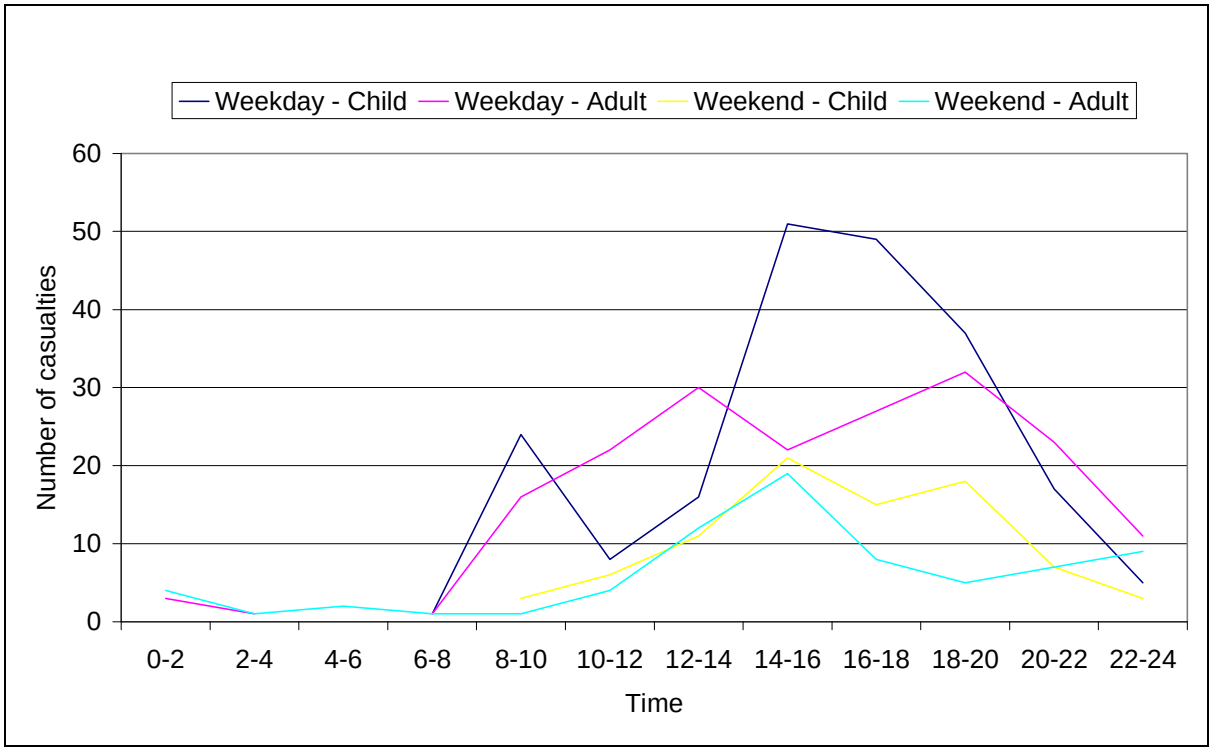


Table 13-8 shows the number of hit and run accidents by accident severity. Overall, 32% of accidents had at least one involved vehicle recorded as 'hit and run', which is significantly higher than on all built-up roads in England (speed limit 20mph, 30mph or 40mph) in 2003, where 15% of accidents had at least one vehicle coded as 'hit and run'. 2 hit and run accidents were fatal and 89% of hit and run accidents were slight accidents.

Table 13-8: Hit and run accidents

		Fatal	Serious	Slight	Total	% of Total
Project Area	Hit and run	2	49	565	616	32.2%
	Total accidents	16	192	1705	1913	100.0%
England Built-up roads, 2003	Hit and run	97	2035	19064	21196	15.1%
	Total accidents	1196	16913	122258	140367	100.0%

Table 13-9 shows the number of accidents in the project area by the precipitating factor as recorded by the police. This is the identifying factor leading directly to the accident The most common precipitating factors were 'failed to avoid vehicle/object', accounting for 29% of accidents, 'pedestrian entered carriageway' and 'failed to give way with 19%. 'Pedestrian entered carriageway' accounted for 39% of fatal and serious accidents. An analysis of precipitating factors in trial areas of GB in Road Casualties Great Britain: 2003 shows similar common factors, although 'loss of control' accounted for 19% compared with 7.5% in the project area, and pedestrian entered carriageway accounted for 11%in the trial areas.

Table 13-9: Accidents by precipitating factor

Precipitating factor	Fatal	Serious	Slight	Total	%
Failed to stop	0	4	40	44	2.3%
Failed to give way	0	16	352	368	19.2%
Failed to avoid pedestrian	3	7	54	64	3.3%
Failed to avoid vehicle/object	1	18	544	563	29.4%
Failed to signal	1	0	0	1	0.1%
Loss of control	5	35	103	143	7.5%
Pedestrian entered carriageway	4	78	285	367	19.2%
Passenger fell	0	3	10	13	0.7%
Swerved to avoid object	0	1	1	2	0.1%
Sudden braking	0	0	20	20	1.0%
Poor turn/manoeuvre	0	7	136	143	7.5%
Poor overtaking	0	7	48	55	2.9%
Drove wrong way	0	0	3	3	0.2%
Opening door carelessly	0	0	2	2	0.1%
Other PF	2	8	75	85	4.4%
unknown	0	8	32	40	2.1%
Total	16	192	1705	1913	100.0%

Figure 13-8 shows the casualties in the project area by precipitating factor. 243 out of 293 child pedestrian casualties were in accidents where the precipitating factor was ‘pedestrian entered carriageway’. This was also most common for adult pedestrians. The most common precipitating factor of accidents for adult drivers were ‘failed to avoid object’, ‘failed to give way’, ‘loss of control’ and ‘poor turn/manoeuvre’.

Table 13-10: Casualties by precipitating factor

Precipitating factor	Pedestrian		Driver/Passenger		Total	% of total
	Child	Adult	Child	Adult		
Failed to stop	3	6	8	47	64	2.4%
Failed to give way		2	76	483	561	21.0%
Failed to avoid pedestrian	18	57	1	2	78	2.9%
Failed to avoid vehicle/object	5	11	101	692	809	30.2%
Failed to signal			1	1	2	0.1%
Loss of control		11	28	216	255	9.5%
Pedestrian entered cway	243	130		7	7	0.3%
Passenger fell		2	1	10	13	0.5%
Poor overtaking		3	12	78	93	3.5%
Poor turn/manoeuvre	2	6	25	177	210	7.8%
Sudden braking		1	11	24	36	1.3%
Swerved to avoid object				4	4	0.1%
Drove wrong way		1	1	2	4	0.1%
Opening door carelessly				2	2	0.1%
Other PF	9	21	8	69	107	4.0%
Unknown	13	10	4	31	58	2.2%
Total	293	261	277	1845	2676	100.0%

As well as the precipitating factor, the reasons why the accident happened are coded using up to three contributory factors from a list of 54, plus ‘other’. The factors recorded are the view of the reporting officer, and do not always come from a detailed accident investigation. Table 13-12 shows the most common contributory factors in accidents. The most common contributory factor in the project area was careless/thoughtless/reckless, which was a factor in 37% of accidents, which accounted for 21% in the GB trial. The most commonly coded contributory factor in the GB trial was ‘excessive speed’, which accounted for 28% of accidents, but only 3.1% in the project area.

Table 13-11: Most common contributory factors in accidents

Factor	Fatal	Serious	Slight	Total	% of total
Careless/thoughtless/reckless	8	95	915	1018	36.6%
Inattention	5	41	487	533	19.2%
Following too close	0	2	281	283	10.2%
Lack of judgement	1	21	210	232	8.3%
Failure to judge other person's path or speed	0	10	148	158	5.7%
Pedestrian masked	1	27	70	98	3.5%
Failed to look	0	21	75	96	3.5%
Excessive speed	5	9	73	87	3.1%
Aggressive driving	0	6	67	73	2.6%
Other (personal)	1	9	42	52	1.9%
Impairment - alcohol	0	4	45	49	1.8%
Stationary or parked vehicle	0	4	20	24	0.9%
Slippery road	0	0	12	12	0.4%

Table 13-12 shows the casualties by contributory factor. Note that the total at the bottom of the table is the total contributory factors, and as each accident can have 3 factors, this is not a count of casualties. The pedestrian casualties were often in accidents with 'careless/thoughtless/reckless', 'inattention' or 'pedestrian masked'. 'Inattention' and 'careless/thoughtless/reckless' was also a common factor for accidents involving drivers/passengers. 150 casualties were in accidents where 'excessive speed' was a factor, 5 of which were adult pedestrians. In RCGB, 2003, an analysis of contributory factors gives excessive speed as a factor in 28% of fatal accidents, 18% of serious accidents, and 11% of slight accidents.

Table 13-12: casualties by contributory factor

Cause	Pedestrian				Driver/Passenger				Total	
	Child		Adult		Child		Adult			
Aggressive driving	2	0.5%	9	2.7%	14	3.7%	84	3.0%	109	2.8%
Animal out of control							2	0.1%	2	0.1%
Bend/winding road	1	0.3%							1	~
Careless/thoughtless/reckless	171	45.6%	139	42.2%	141	37.0%	960	33.9%	1411	36.0%
Defective lights or signals						0.0%	1	~	1	~
Distraction - in/on vehicle			1	0.3%	6	1.6%	5	0.2%	12	0.3%
Distraction - outside vehicle							2	0.1%	2	0.1%
Distraction - stress	1	0.3%							1	~
Excessive speed			5	1.5%	13	3.4%	132	4.7%	150	3.8%
Failed to look	31	8.3%	19	5.8%	13	3.4%	69	2.4%	132	3.4%
Failure to judge other person's path or speed	1	0.3%	5	1.5%	20	5.2%	213	7.5%	239	6.1%
Following too close	2	0.5%			51	13.4%	354	12.5%	407	10.4%
Glare from sun			1	0.3%			7	0.2%	8	0.2%
Impairment - alcohol	1	0.3%	11	3.3%	1	0.3%	55	1.9%	68	1.7%
Impairment - fatigue					1	0.3%	6	0.2%	7	0.2%
Impairment - illness							1	~	1	~
In a hurry	2	0.5%	1	0.3%			1	~	4	0.1%
Inattention	58	15.5%	64	19.5%	61	16.0%	548	19.4%	731	18.7%
Inconspicuous clothing			1	0.3%			1	~	2	0.1%
Inexperience of driving			3	0.9%	1	0.3%	7	0.2%	11	0.3%
Inexperience of vehicle					1	0.3%	6	0.2%	7	0.2%
Interaction or competition with others			1	0.3%	1	0.3%	5	0.2%	7	0.2%
Lack of judgement	4	1.1%	26	7.9%	38	10.0%	281	9.9%	349	8.9%
Looked but did not see					1	0.3%	7	0.2%	8	0.2%
Moving vehicle			1	0.3%					1	~
Nervous/uncertain							2	0.1%	2	0.1%
Other (conditions)	2	0.5%					2	0.1%	4	0.1%
Other (personal)	7	1.9%	9	2.7%	13	3.4%	59	2.1%	88	2.2%
Other (vehicle)	1	0.3%			2	0.5%			3	0.1%
Panic	2	0.5%					2	0.1%	4	0.1%
Pedestrian masked	71	18.9%	28	8.5%			1	~	100	2.6%
Poor street lighting							2	0.1%	2	0.1%
Slippery road					3	0.8%	13	0.5%	16	0.4%
Stationary or parked vehicle	18	4.8%	5	1.5%			2	0.1%	25	0.6%
Tyres - deflated							1	~	1	~
Total	375	100.0%	329	100.0%	381	100.0%	2831	100.0%	3916	100.0%

Cells with no casualties are shown as blanks. ~ indicates a percentage less than 0.05%

Where the casualty postcode was known, and was within the project area, the Census Output Area of the casualty was calculated. There were some postcodes that were in more than one COA. The casualties for these postcode areas were divided equally between the COAs. Figure 13-5 shows the number of casualties per 100 residents per COA. The areas coloured red have the highest casualties per resident. These figures exclude any residents in the project area who were involved in an accident outside the area.

Figure 13-5: Casualties within project area, casualties per 100 residents

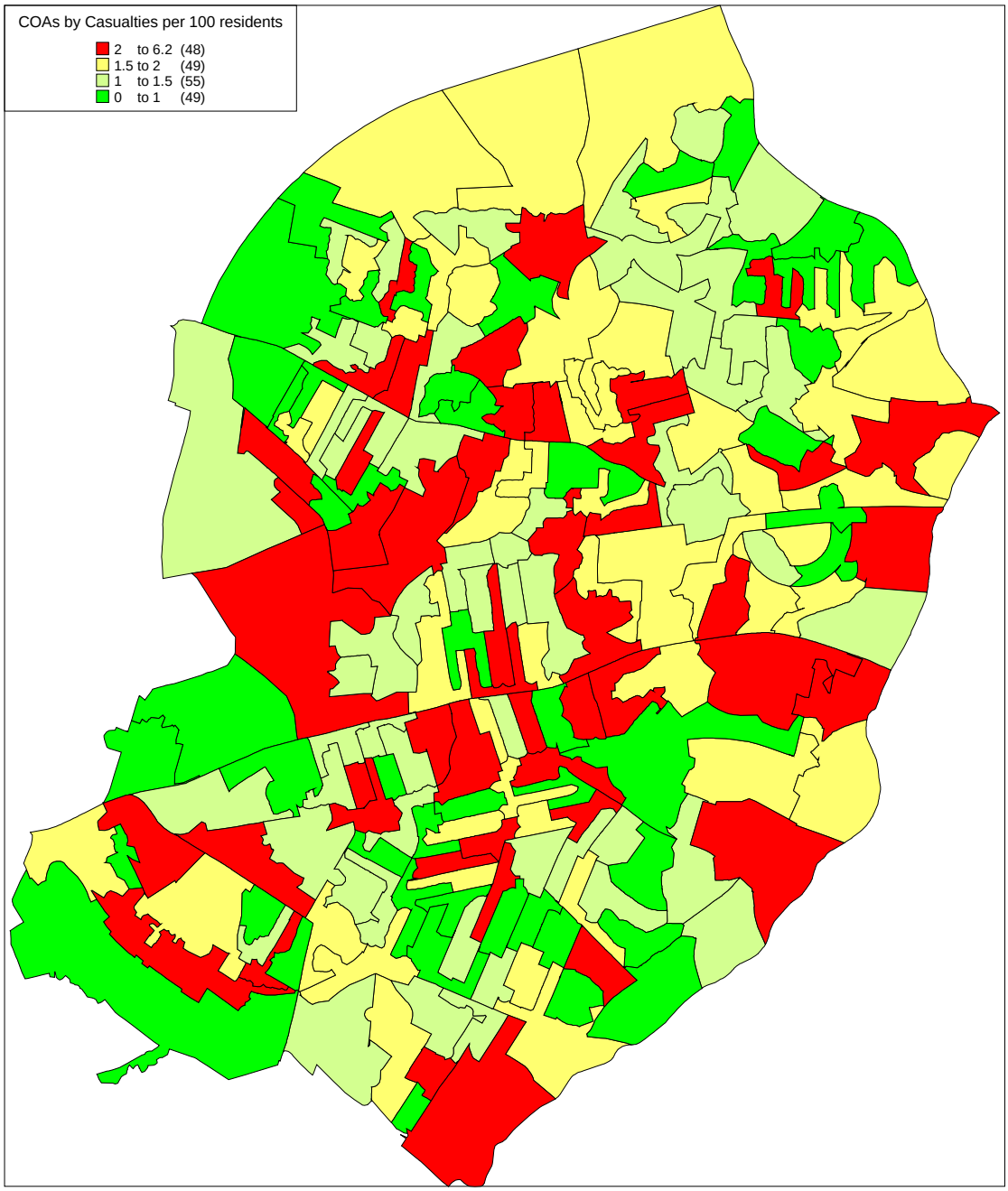


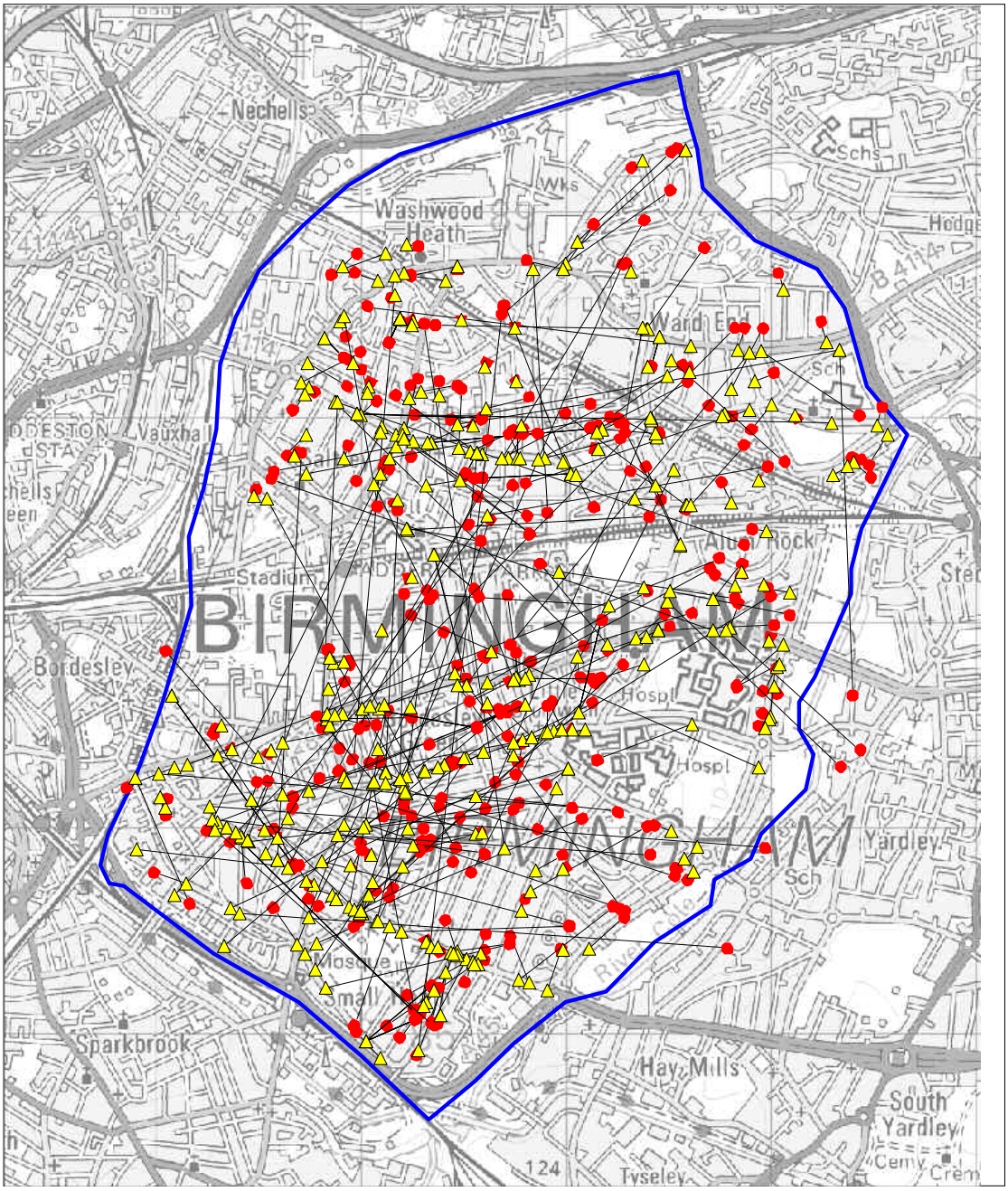
Table 13-13 shows the casualties by postcode area and distance from home for casualties for adult and children pedestrians and vehicle occupants. 24% of child pedestrian casualties were less than 100m from their home, and 12% of child pedestrian casualties in the area were from outside the project area. 46% of adult vehicle occupants were from outside the project area

Table 13-13: Casualties by postcode area and distance from home

Casualty postcode	Casualty distance from home	Pedestrian		Driver/Passenger		Total	% of total
		Child	Adult	Child	Adult		
Birmingham Postcode	<100m	70	28	15	44	157	5.9%
	100-200m	34	39	14	50	137	5.1%
	200-300m	27	15	9	35	86	3.2%
	300-400m	11	7	15	43	76	2.8%
	400-500m	9	7	10	45	71	2.7%
	500-1000m	30	28	30	204	292	10.9%
	1000-2000m	21	28	45	285	379	14.2%
	2000-3000m	6	9	14	80	109	4.1%
	3000-4000m	1	2		14	17	0.6%
	Outside project area	47	59	98	865	1069	39.9%
Non Birmingham postcode		5	7	3	89	104	3.9%
Blank/unknown		32	32	24	91	179	6.7%
Total		293	261	277	1845	2676	100.0%

Figure 13-6 shows a plot of pedestrian casualties in the project area (yellow triangles), with lines linking to red dots of the casualty's home.

Figure 13-6 Pedestrian casualties with casualties with postcodes within project area



13.3 Child pedestrians and cyclists

There were 325 child pedestrians and cyclists injured in the project area, 12% of total casualties in the area. Table 13-14 shows the number of child pedestrian and cyclist casualties by age group and injury. 40% of the casualties were aged between 6 and 10, 33% were aged 11 to 15 and 27% were aged less than six.

Table 13-14: child pedestrian and cyclist injuries by age

Casualty injury	0-5		6-10		11-15		Total	
	Cyclist	Pedestrian	Cyclist	Pedestrian	Cyclist	Pedestrian	Cyclist	Pedestrian
Fatal	0	2	0	1	0	0	0	3
Serious	0	12	3	21	0	17	3	50
Slight	2	71	10	96	17	73	29	240
Total	2	85	13	118	17	90	32	293
% of child pedestrian / cyclist casualties	0.6%	26.2%	4.0%	36.3%	5.2%	27.7%	9.8%	90.2%

There were 53 accidents involving a child pedestrian who was killed or seriously injured, of which 3 were killed. These were the only children killed in the project area.

All 3 of the fatalities were under ten years old. A brief description of the 3 fatal accidents is shown below:

Vehicle reversing ran over 9 year old child who was standing to the rear of the vehicle. The driver did not see the child, and the precipitating factor was 'reversing negligently', and contributory factors were inattention and careless/thoughtless/reckless.

Mother of child killed was parking her car on driveway of house and drove into 2 year old child. Precipitating factor was 'failed to avoid pedestrian' and contributory factor was careless/thoughtless/reckless

2 year old child was killed whist crossing Washwood Heath Road (dual carriageway) from central reservation. Child was accompanied by grandfather, who was uninjured. Precipitating factor was 'pedestrian entered carriageway', and contributory factor was inattention.

52 of the KSI casualties were hit by a car, and in 45 of the accidents, the precipitating factor (police officer's assessment) was 'pedestrian entered carriageway without due care (driver not to blame)', and in 3 accidents it was 'failed to avoid pedestrian'. 42 casualties were crossing the carriageway >50m away from a crossing, 26 of which were masked by parked vehicles.

There were no child cyclist fatalities. There were 29 slightly injured child cyclists, and only 3 seriously injured child cyclist, all of which involved a child seriously injured and no other casualties.

Table 13-15 shows casualties by age group and school journeys. 37% of casualties aged 11 to 15 were on a school journey, compared with 19% of 6 to 10 year olds.

Table 13-15: Child pedestrian and cyclist casualties by age group, injury, and school journeys

Casualty injury	1-5		6-10		11-15		Total
	Other	School journey	Other	School journey	Other	School journey	
Fatal	2		0	1	0	0	3
Serious	12		20	4	10	7	53
Slight	65	8	86	20	57	33	269
Total	79	8	106	25	67	40	325

Figure 13-7 shows the location of the child pedestrian and cyclist accidents by severity. The red stars indicate the location of schools. There is little clustering of accidents around the schools; 43% of child pedestrian and cyclist casualties were at junctions.

Figure 13-7: Child pedestrian and cyclist casualties

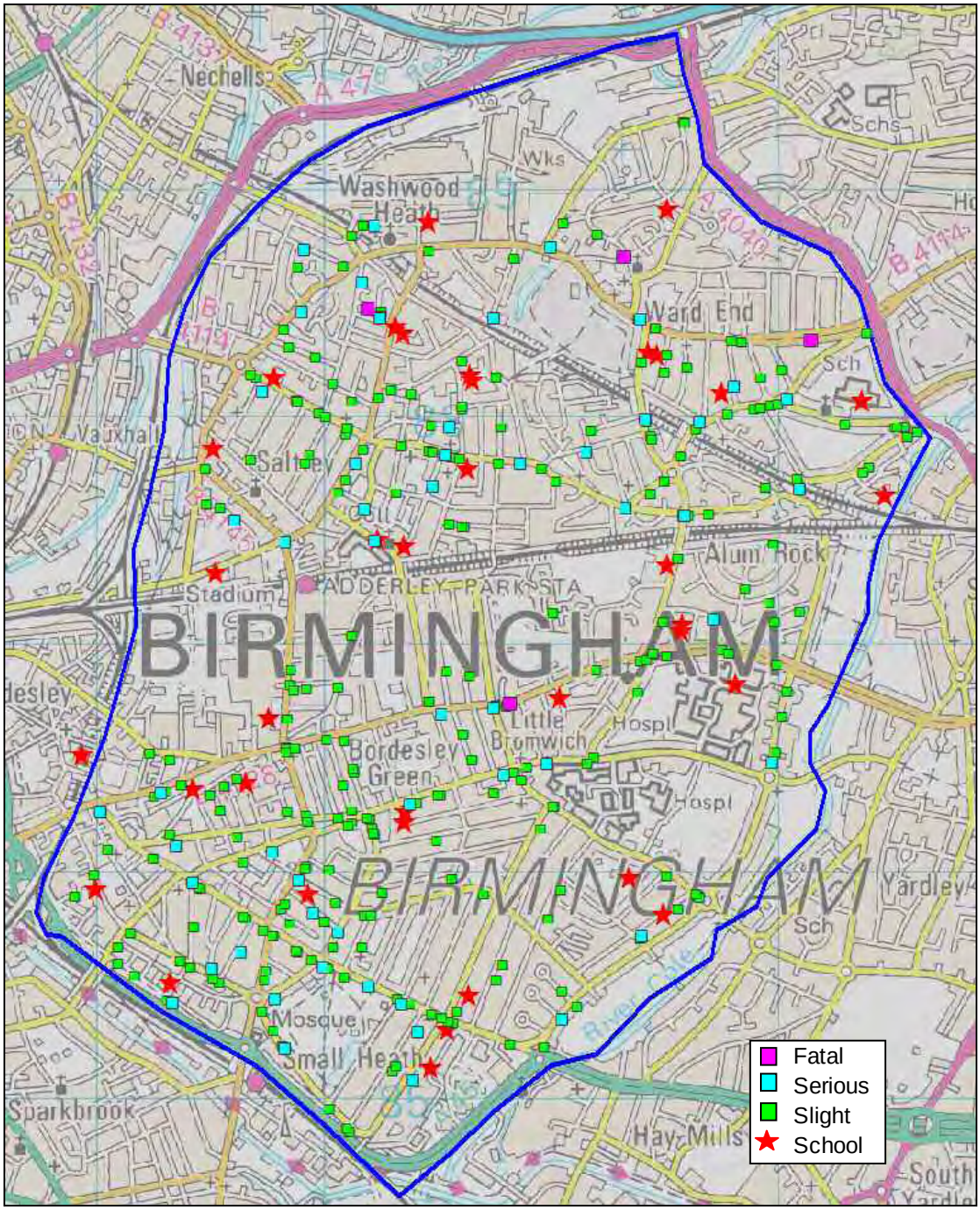


Table 13-16 shows the distance from home by age group for the child pedestrian casualties. 52 of the casualties (18%) were from outside the project area.

Table 13-16: Child pedestrian casualties by age group, postcode area and distance from home

Casualty postcode	Casualty distance from home	01-05	06-10	11-15	Total	% of total
Birmingham Postcode	<100m	28	31	11	70	23.9%
	100-200m	4	20	10	34	11.6%
	200-300m	9	12	6	27	9.2%
	300-400m	2	5	4	11	3.8%
	400-500m	3	3	3	9	3.1%
	500-1000m	6	8	16	30	10.2%
	1000-2000m	7	5	9	21	7.2%
	2000-3000m		3	3	6	2.0%
	3000-4000m		1		1	0.3%
	Outside project area	12	18	17	47	16.0%
Non Birmingham PostCode		4	1		5	1.7%
Blank/unknown		10	11	11	32	10.9%
Total		85	118	90	293	100.0%

13.4 Adult pedestrians and cyclists

303 adult pedestrians and cyclists were injured in the project area, 11% of total casualties in the area.

The number of adult pedestrians and cyclists injured is shown in Table 13-17. Seven pedestrians were killed. 4 of whom were aged over 60.

Table 13-17: Adult pedestrian and cyclist injuries by age

		16 - 20	21-30	31-40	41-50	51 - 60	61-70	70+	Total
Cyclist	Fatal	0	0	0	0	0	0	0	0
	Serious	1	6	1	1	0	2	0	11
	Slight	4	5	13	4	3	1	1	31
	Total	5	11	14	5	3	3	1	42
Pedestrian	Fatal	1	0	1	1	0	1	3	7
	Serious	9	6	9	9	10	8	9	60
	Slight	38	48	40	18	12	19	19	194
	Total	48	54	50	28	22	28	31	261

Figure 13-8 shows the location of the accidents involving adult pedestrian and cyclist casualties. The accidents are generally along the B-roads in the area, especially Coventry Road and Alum Rock Road, and at junctions, which match up well with the locations of non residential addresses in the area, Figure 11-3.

Figure 13-8: Adult pedestrian and cyclist casualties

166 of adult pedestrian casualties were crossing the road (64% of all adult pedestrian casualties). Of these 47 were masked by a vehicle, and three quarters were crossing the road more than 50m from a crossing.

57% of adult pedestrian casualties were injured at a junction; mostly a T-junctions (see Table 13-18). A higher percentage of casualties were injured at junctions in the dark.

Table 13-18: Adult pedestrian casualties by junction detail and lighting

	daylight		darkness		Total	
	No	%	No	%	No	%
Not at or within 20m of junction	78	46.7%	35	37.2%	113	43.3%
Mini roundabout	2	1.2%	4	4.3%	6	2.2%
Roundabout	8	4.8%	7	7.4%	15	5.7%
T/staggered junction	50	29.9%	35	37.2%	85	32.6%
Slip road	0	0.0%	0	0.0%	0	0.0%
Crossroads	14	8.4%	12	12.8%	26	10.0%
Multiple junction	0	0.0%		0.0%	0	0.0%
Private drive/entrance	15	9.0%	1	1.1%	16	6.1%
Other junction	0	0.0%	0	0.0%	0	0.0%
Total	167	100.0%	94	100.0%	261	100.0%

13.5 Car occupants

Car occupants account for 68% of casualties within the project area. Table 13-19 shows the number of injuries by age for car drivers and passengers. There were 6 adult fatalities, of which. 3 were car drivers aged 16-20. 45% of casualties were aged between 16 and 30. There were no children killed as car passengers or drivers, but 4 children were seriously injured, all aged 11 to 15.

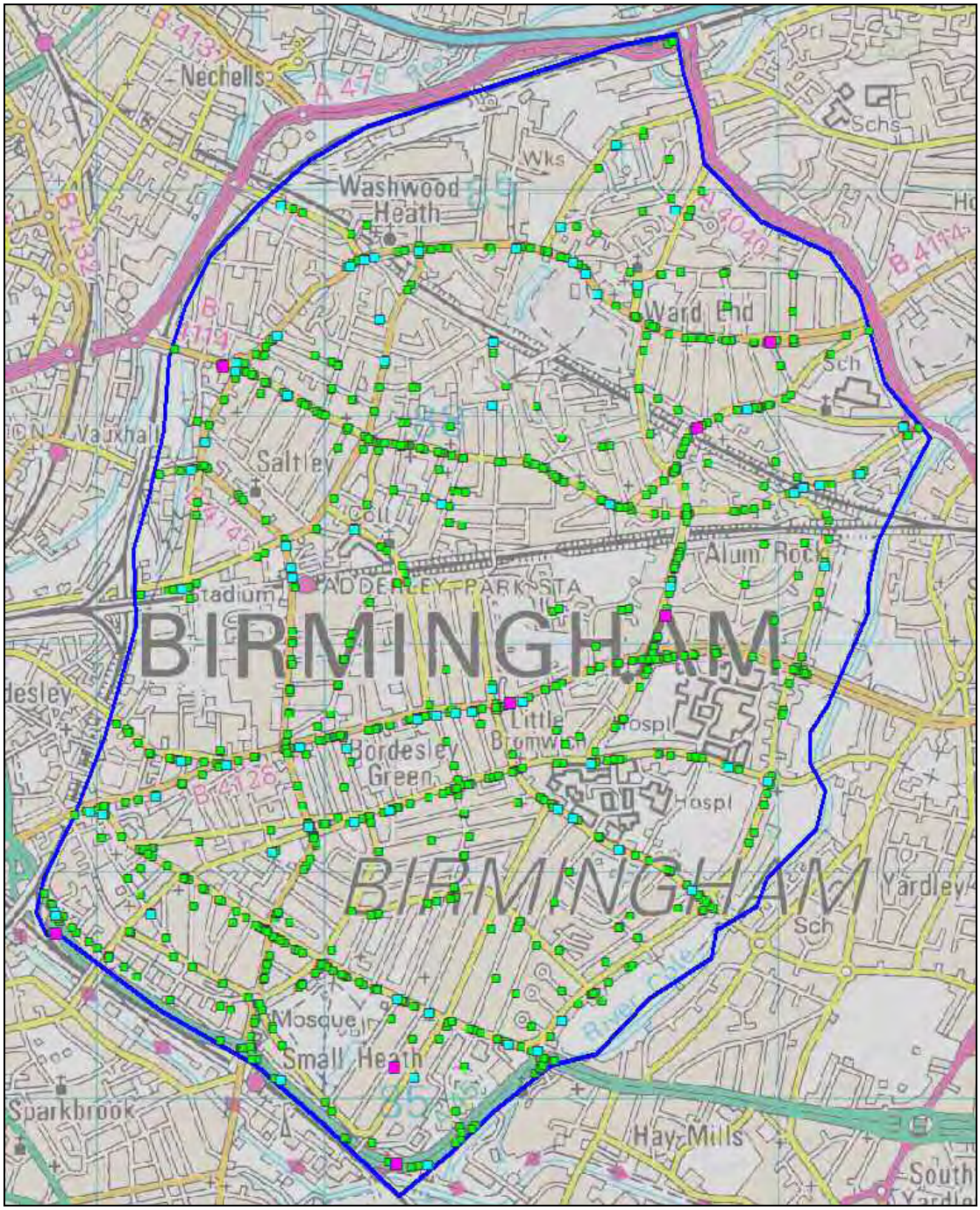
Table 13-19: Car occupant driver and passenger injuries by age

		0	1-5	6-10	11-15	16 - 20	21-30	31-40	41-50	51-60	61-70	70+	unknown	Total
Driver	Fatal	0	0	0	0	3	0	0	0	0	0	1	0	4
	Serious	0	0	0	1	11	20	9	2	3	0	0	0	46
	Slight	0	0	0	2	74	375	287	158	48	28	13	10	995
	Total	0	0	0	3	88	395	296	160	51	28	14	10	1045
Passenger	Fatal	0	0	0	0	0	2	0	0	0	0	0	0	2
	Serious	0	0	0	3	14	8	4	2	3	2	0	0	36
	Slight	4	39	58	65	137	180	93	59	34	22	13	45	749
	Total	4	39	58	68	151	190	97	61	37	24	13	45	787

Three quarters of the casualties were in vehicles ‘going ahead other’ (49%), ‘waiting to go ahead, but help up’(14%) or ‘turning right’ (13%).

Figure 13-9 shows the location of the accidents involving cars. The accidents are generally on the B-roads through the area, where there is likely to be more traffic, and at junctions, although there are also some accidents on more minor roads.

Figure 13-9: Accidents involving injured car occupants



13.6 Accident rates

Accident rate is important in order to compare areas or time periods, as it takes into account the traffic on a route. The DfT casualty target for slight casualties is also in terms of the casualty rate.

In order to calculate accident rates for the roads in the area, a count of vehicles on the road is required. BCC have sent TRL some traffic information, as shown in Table 13-20. There are several counts on Small Heath Highway, the A-road at the south of the area, but there is little information (or difficult to extract form turning counts) for the B-roads within the areas, where there are large numbers of casualties. BCC need to ensure that traffic is measured on these roads, so any changes in traffic levels and accident rates can be assessed

Table 13-20: Traffic count locations

OSGR	Road Names	Dates	Comments	16Hr Totals	Calculated AADT 1998-2003
410300 284800	Small Heath Highway Waverley Rd To Heybarnes	23/02-29/02	Small Heath Highway		
411500 289800	Bromford Lane North Of Bromford Road	16/10-22/10		16497	
411610 286960	Bordesley At Alston U Turns	13/01/2003	U turns		
410280 288370	Highfield Rd Sth Of Berry Rd O/S School	06/09/2002	outside school	4017	3551
411270 289190	Drews Lne Nth Of Winnington Rd O/S Hse No 114	10/09/2002		6319	5587
409653 285187	Golden Hillock Rd/Small Hth Highway	13/02/2002	Roundabout traffic		
409541 286473	Doris R/Bordesley Grn/Cattell R/Garrison Ln	02/04/2003	Roundabout traffic		
409829 286543	Bordesley Grn Rd/Bordesley Grn/Victoria St	27/01/2003	Roundabout traffic		
409460 287788	Adderley Rd/Ash Rd/Duddeston Mill Rd	27/01/2003	Roundabout traffic		
409829 287441	Ash Rd/Arden Rd/Bordesley Grn Rd	27/01/2003	Roundabout traffic		
409613 288219	Washwood Hth Rd/Alum Rock Rd/Adderley Rd	31/01/2003	Roundabout traffic		
410847 286446	Blake Lne/Yardley Grn Rd/Hob Moor Rd	08/10/2002	Roundabout traffic		
411618 286962	Alston Rd/Bordesley Grn East/Hosp Ent	13/01/2003	Roundabout traffic		
411176 286488	Belchers Lne / Yardley Grn Rd	08/10/2002	Roundabout traffic		
412625 287965	Stechford Ln/Station Rd/Burney/Cotterills	06/02/2004	Roundabout traffic		
412089 287681	Treaford Lne/Cotterills Ln/Eastfield Rd	22/05/2003	Roundabout traffic		
409790 285810	R2754 Wright S Wst Of Muntz Car Pk 2 Opp No 50	15/11/2002	Religious establishment car park stay times		

13.7 Accident summary

Accident data was obtained from Stats19, but there are likely to be accidents that were not reported to the police. Accident matching should be carried out to match the hospital records of road accident casualties with Stats19 records.

Data from a control area also needs to be analysed, to assess whether any change in accident numbers or characteristics is due to changes in the area. Possible controls are identified in Section 2.8 and Section 4.

Between March 1999 and February 2004 (5 years), 16 people were killed, 222 people seriously injured and 2,438 people seriously injured in road accidents in the project area (Stats19 data). The number of slight accidents has increased over the five year period, probably due to an increase in traffic. The accident rates on the main routes through the area need to be monitored.

43% of the accidents involved two cars only and 23% involved one car and at least one pedestrian. 11% of casualties were child pedestrians and cyclists.

There is a high incidence of 'hit and run' accidents in the project area, including 2 fatal accidents. This may be a result of vehicle crime, or untaxed vehicles or unlicensed drivers. Further information, including information from the police or DVLA is needed to establish why this type of accident is common.

Many accidents occur on the B-roads within in the area, and many car occupant casualties live outside the area. This suggests that the routes are being used as through routes, but these routes also have local shopping areas and facilities on them, so are focuses for pedestrian activities. This leads to clusters of pedestrian and vehicle accidents at these locations.

There are many accidents occurring at junctions; half of pedestrians and three quarters of vehicle occupants are injured at junctions.

Most of the pedestrians injured who were crossing the road were not using a crossing, and were often masked by a vehicle. There may be areas where additional parking controls or an additional crossing point would assist pedestrians crossing the road.

For children aged less than 11, 85% of casualties were not making school journeys. For 11-15 year olds, 37% of casualties were on a school journey.

Seven adult pedestrians were killed. 4 of whom were aged over 60. This group has different needs to younger residents, which should be considered.

Excessive speed was a contributory factor in 3% of accidents. Careless/thoughtless/reckless and inattention were the most common factors.

14 Housing

The type of housing available to people in the study area is an important indicator of poverty, as highlighted by the indices of multiple deprivation (see Appendix C), of which a) difficulty of access to owner occupation, b) social and private housing in poor condition, and c) houses without central heating are listed as indices of deprivation for England. The following sections review the housing sector in the study areas, providing an overview of housing density, housing tenure and accommodation type and provision of household amenities.

14.1 Residents per Hectare

Housing density is calculated as the total Census output area (COA) divided by the number of residents living in the COA.[3] Figure 14-1 indicates that Bordesley Green in the South and Saltley in the North West of the study area have the highest housing densities, with up to 250 people per hectare, accounting for 20% of the study area. There is however an average of 60 residents per hectare for all COA's in the study area (see Table 14-1).

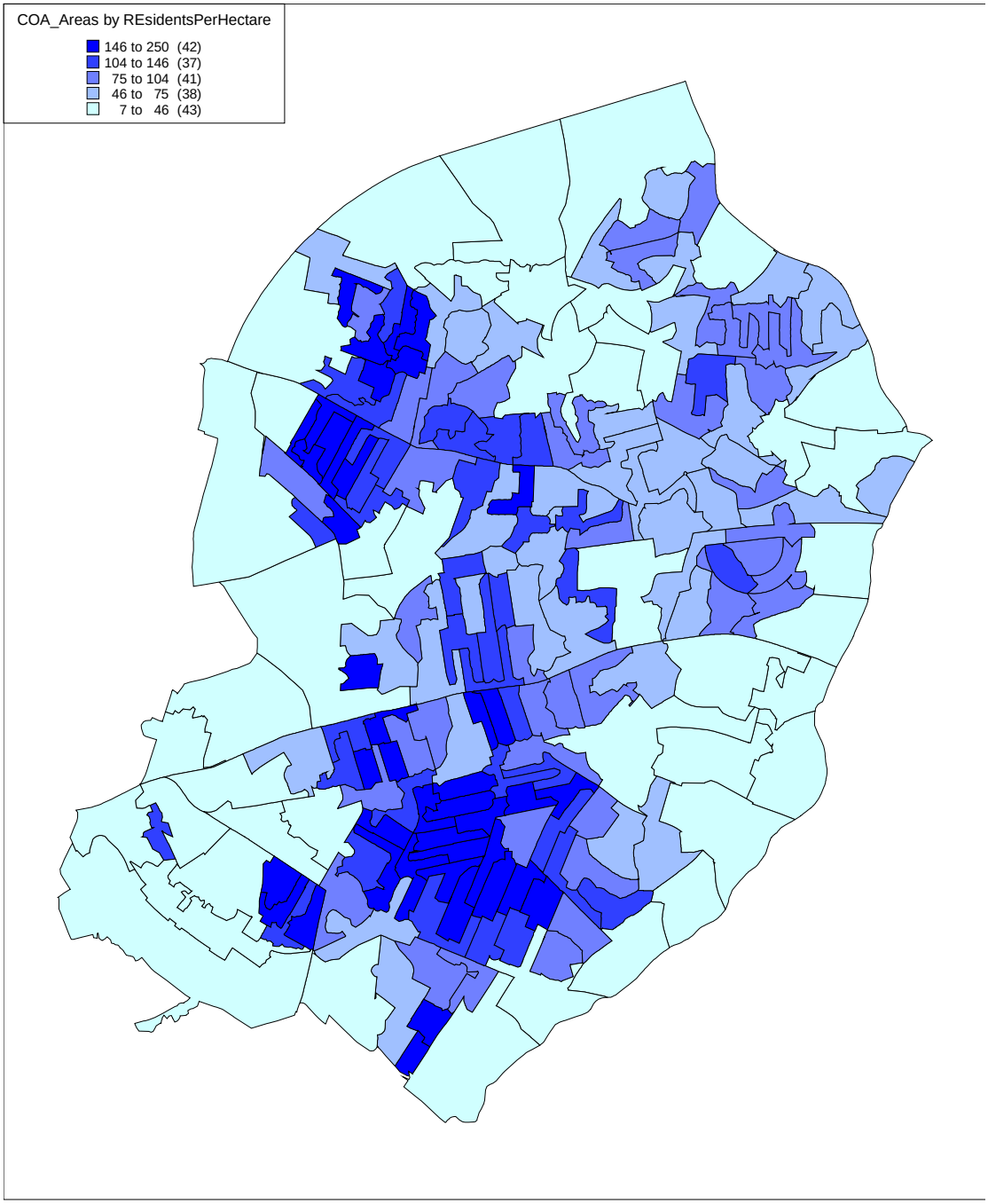
There are an average of 19 dwellings per hectare (dph) in the study area (see Table 14-1), which is relatively low compared with the government's recommended minimum housing densities of 30dph and maximum housing densities of 50dph, as outlined in the ODPM's Planning Policy Guidance 3 (2000). However, the Census data also revealed that, of the 201 COA's in the study area, 13 have more than 50 dwellings per hectare , with the highest density of 86 dph recorded from the 2001 Census of Population and Housing.

Table 14-1: Average housing statistics in the study area

Total Residents	Total Households	Residents per Household	Households per hectare	Residents per hectare
78879	24654	3.2	18.7	59.9

[3] Note that there may be areas within each COA that are not residential, for example, schools, hospitals, businesses and parks. These are illustrated in Figure 14-1 by the light blue shading in the peripheral areas of the study area.

Figure 14-1: Residents per hectare by COA



Source: Census of Housing and Population 2001

14.2 Tenure

Table 14-2 shows the tenure for accommodation within the project area and for England and Wales. The project area has a lower proportion of owner occupied accommodation (54%) compared with the national average (69%). However, the proportion of owner occupiers who own their house outright only varies by 3% between the ICSDP area and England and Wales, while there are 12% fewer people who have a mortgage still to pay on their property in the study area than in England and Wales. ODPM housing statistics for 2003 indicate that owner occupation in the inner city study area is

particularly low compared with 71% in the West Midlands, and that rented housing from the local authority in the ICSDP area is particularly high compared with 11% in the West Midlands.

Table 14-2: Housing Tenure

	ICSDP AREA		England & Wales	
	Number	%	Number	%
Households:Owner occupied: Owns outright	6528	26.5%	6380682	29.5%
Housholds: Owner occupied: Owns with a mortgage or loan	6590	26.7%	8396178	38.8%
Households: Owner occupied: Shared ownership*	271	1.1%	139605	0.6%
Households: Rented from: Council (local authority)	4730	19.2%	2868529	13.2%
Households: Rented from: Housing Association/Registered Social Landlord**	2874	11.7%	1288722	5.9%
Households: Rented from: Private landlord or letting agency	2564	10.4%	1888696	8.7%
Households: Rented from: Other***	1088	4.4%	698063	3.2%
All households	24645	100.0%	21660475	100.0%

Source: Census of Housing and Population 2001

* Pays part rent and part mortgage

** Includes Housing Co-operative and Charitable Trust

*** Includes employer of a household member and relative or friend of a household member and living rent free

Figure 14-2 to Figure 14-5 show the proportion of households in each COA that are owner occupied, rented from the Council, rented from a housing association and privately rented respectively. There is a broad geographical mix of housing tenure in the study area, indicating heterogeneity among households with respect to income, receipt of social security and socio-economic characteristics of people living within the area.

Figure 14-2: % of households owner occupied by COA

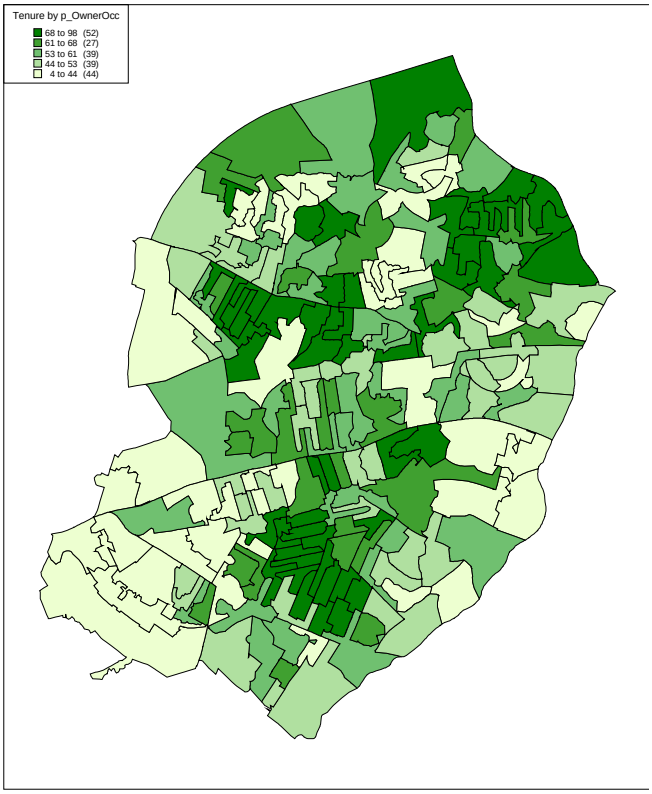


Figure 14-3: % of households rented from council by COA

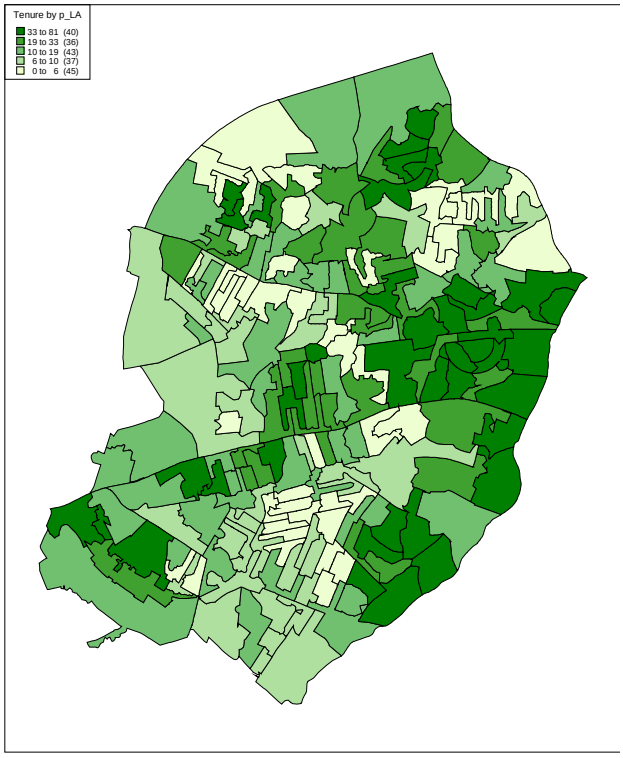


Figure 14-4: % of households rented from housing association or registered social landlord by COA

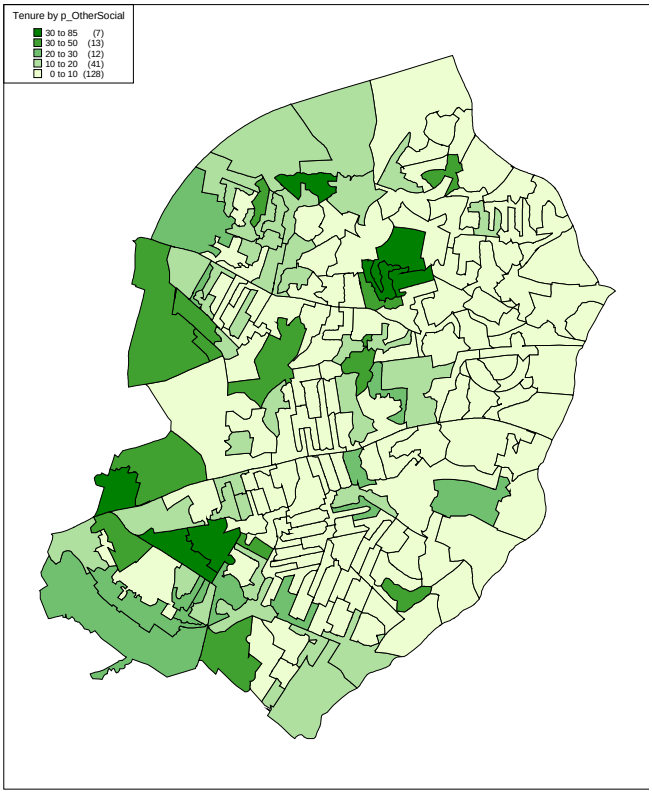
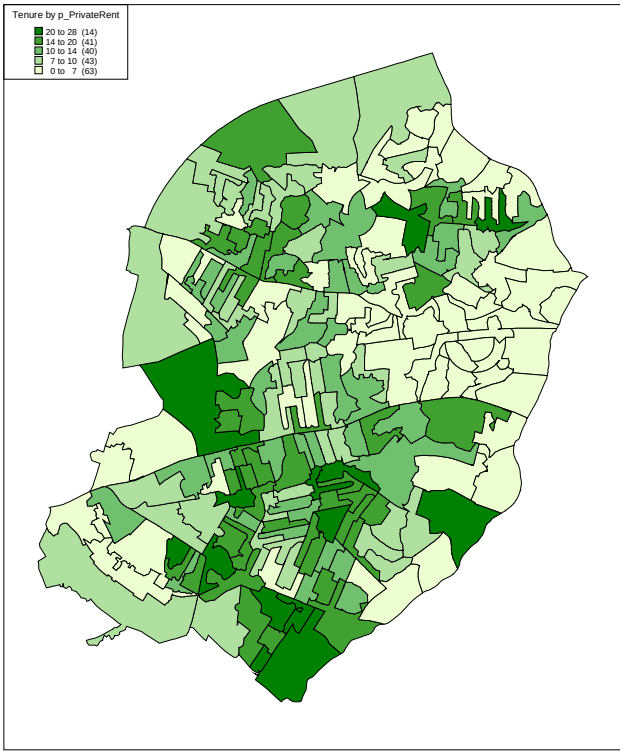


Figure 14-5: % of households privately rented by COA



14.3 Accommodation Type

The project area has a high number of terraced houses, making up 51% of the accommodation, as shown in Table 14-3. The remainder of the accommodation is comprised of semi-detached houses (25%) and flats (17%). There is a small number of detached homes (6.5%) compared with the national average of 22.8%. Housing type in the study area is responsible in part for the high number of dwellings per hectare because terraced housing takes up less area than any other housing type (excluding flats), and typically have relatively small, sometimes back to back gardens, especially Victorian dwellings dating from the turn of the Twentieth Century.

Table 14-3: Accommodation type

Accommodation type of household spaces	ICSDP AREA		England & Wales	
	Number	%	Number	%
With residents	24654	97.3%	21660475	96.1%
With no residents: Vacant	655	2.6%	727448	3.2%
With no residents: Second residence / holiday accommodation	22	0.1%	150718	0.7%
Whole house or bungalow: Detached	1635	6.5%	5131821	22.8%
Whole house or bungalow: Semi-detached	6420	25.3%	7117662	31.6%
Whole house or bungalow: Terraced (including end terrace)	12995	51.3%	5869878	26.0%
Flat; maisonette or apartment: Purpose Built block of flats or tenement	3194	12.6%	3069566	13.6%
Flat; maisonette or apartment: Part of a converted or shared house (including bed-sits)	795	3.1%	997567	4.4%
Flat; maisonette or apartment: In commercial building*	298	1.2%	258303	1.1%
Caravan or other mobile or temporary structure	6	0.0%	93844	0.4%
Total household spaces	25343	100.0%	22538641	100.0%

Source: Census of Population and Housing 2001

* 'In commercial building' includes in an office building; or hotel; or over a shop

14.4 Household amenities

Table 14-4 shows the provision of household amenities. The first row shows occupancy rating, which is a measure of overcrowding. An occupancy rating of zero implies a room per person in the household, plus two communal rooms, excluding bathrooms, and a negative occupancy rating indicates there are too few rooms. 17% of households in the project area have a negative occupancy rating, and 35% of households do not have central heating, compared with 44% recorded in the 1991 Census (Gulliver, 2002). According to Gulliver (2002), those living in terraced housing, housing rented from the local authority and rented from a private landlord or living in tied accommodation, are most likely to have no central heating. These findings are corroborated by national statistics showing that in 1997 there were 2,100,000 houses owned by local authorities and housing associations that did

not meet the 'decent' homes standard. Local authorities had a £19 billion backlog of repairs and improvements.

Table 14-4: Household amenities

	ICSDP		England & Wales	
	Number	**%**	**Number**	**%**
Households with an occupancy rating of -1 or less*	4064	16.5%	1510422	7.0%
Households with central heating and sole use of bath/shower and toilet	15981	64.8%	19756038	91.2%
Households without central heating or sole use of bath/shower and toilet	97	0.4%	34617	0.2%
Households without central heating; with sole use of bath/shower and toilet	8489	34.4%	1800316	8.3%
Households with central heating; without sole use of bath/shower and toilet	111	0.5%	69504	0.3%
Households; Lowest floor level; Basement or semi-basement	461	1.9%	588272	2.7%
Households; Lowest floor level; Ground level (street level)	21270	86.3%	18590782	85.8%
Households; Lowest floor level; 1st/2nd/3rd or 4th floor	2598	10.5%	2339761	10.8%
Households; Lowest floor level; 5th floor or higher	324	1.3%	141660	0.7%
All households	24654	100.0%	21660475	100.0%
All residents	78872	n/a	52041916	n/a
Average household size	3.2	n/a	2.4	n/a
Average number of rooms per household	5.2	n/a	5.34	n/a

Source: Census of Population and Housing 2001

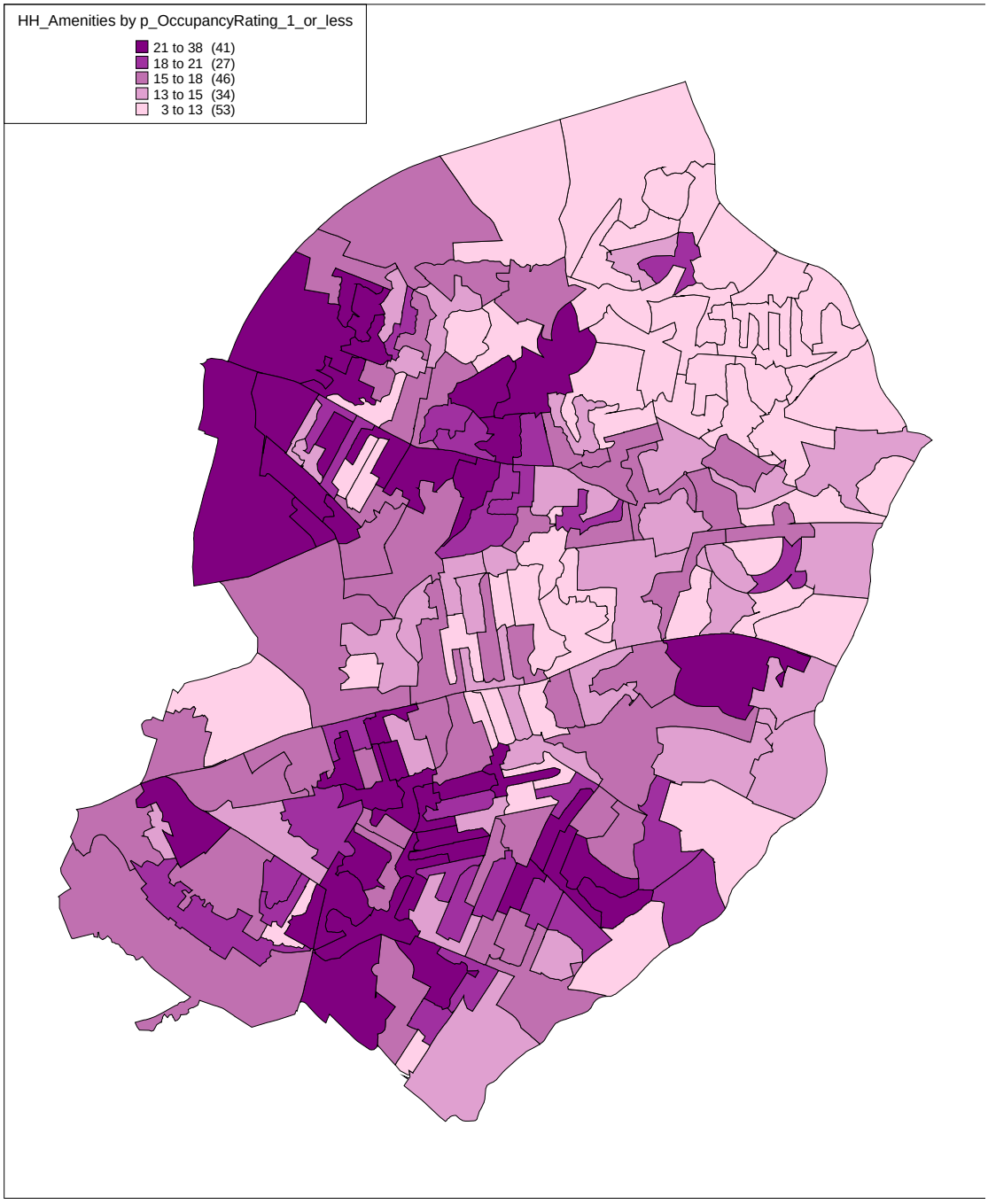
* The occupancy rating provides a measure of under-occupancy and overcrowding. For example; a value of -1 implies that there is one room too few and that there is overcrowding in the household. The occupancy rating assumes that every household; including one person households; requires a minimum of two common rooms (excluding bathrooms)

Figure 14-6 shows the percentage of households with a negative occupancy rating by COA, highlighting Small Heath and Saltley as wards with the highest proportion of negative occupancy in the study area. Gulliver's 2002 study found that 23% of people sampled in the Washwood Heath, Small Heath and Nechells wards said that their home is too small for their needs, 32% of which live in local authority housing.

Overcrowding and over-occupancy is a serious issue that needs to be addressed in order to increase people's quality of life and reduce deprivation (expressed in the multiple indices of deprivation by social and private housing in poor condition and houses without central heating). According to the OPDM's house building quarterly report, during the twelve months to the end of September 2004 house building 'starts' numbered 171.1 thousand (up 9 per cent on the previous twelve month period) and house building completions totalled 151.6 thousand (up 8 per cent on the previous twelve month

period). In the West Midlands however, there was a reduction in house building 'starts' of 1% and a rise of 3% in house building completions over the same period.

Figure 14-6: % of households with an occupancy rating or -1 or less by COA



While the Census data provides the most detailed and accurate account of housing characteristics and statistics in the inner city study area, there are many other sources that can be used for the remainder of the project to extract national and regional housing data, in the absence of another Census dataset before 2011, some of which are listed here:

The National Register of Social Housing – available from 30 April 2005

Survey of English Housing – continuous annual survey conducted by the ODPM

English House Condition Survey – annual survey conducted by the ODPM

Survey of Mortgage Lenders – monthly survey conducted by the ODPM

CORE (COntinuous REcording) – annual survey conducted by the National Housing Federation and Housing Corporation

Neighbourhood statistics (www.neighbourhood.statistics.gov.uk)

According to the ODPM, a decent home is warm, weatherproof and has reasonably modern facilities. The Government believes that everyone should have the opportunity to have a decent home. It is aiming to make all council and housing association housing 'decent' by 2010. It also wants to improve conditions for vulnerable households in privately owned housing. Decent homes are important for the health and well-being of those living in them. Poor housing helps an area to get a bad reputation. That makes it an unpopular place to live, which in turn may lead to the breakdown of communities. In short decent homes are a key element of any thriving, sustainable community.

15 Health

Health is one of the key indicators of quality of life, and is a measure of deprivation, related in particular to levels of morbidity and the provision of health care (highlighted by the ratio of patients to general practitioners, and distance to a health care facility). Indeed, Gulliver's (2002) study revealed that the severest access problems experienced by 15% of people studied in Washwood Heath, Small Heath and Nechells are associated with GPs, while 12% of the sample had difficulty in accessing pharmacies. Nevertheless, 66% of respondents were found to be satisfied or very satisfied with their local health services.

The Government's document on sustainable development 'Quality of Life Counts' (DEFRA, 2004) uses average life expectancy as the health indicator for quality of life. For Britain, life expectancy for people of all social classes has increased but variations for different social groups remain. In 1997-9 a professional woman could expect to live an average of 5.7 years longer than an unskilled woman, while the equivalent gap for men was 7.4 years.

Death rates from circulatory diseases (people under 75) and accidents have halved since the 1970s and death rates from cancer and suicides have fallen during and since the 1990s (DEFRA, 2004). However overall healthy life expectancy has not increased to the same extent as life expectancy so a higher proportion of extra years of life are spent in poor health. Health inequalities also exist: on average, men in the lowest social classes die around five years earlier than their counterparts in the highest. The Government's message is clear - to improve the health of the population overall, and reduce health inequalities.

Nevertheless, there are other means for measuring quality of life through health care and the following areas will be explored more fully by the University of the West of England (Liz Towner):

- Index of multiple deprivation health domain: for 4 wards, Birmingham, and England and Wales
- Limiting long term illness for 4 wards, Birmingham, and England and Wales
- Severe disablement allowance claimants in England and Wales for 4 wards, Birmingham, and England and Wales
- Hospital episode statistics for Birmingham 1999/2000 by age and gender, (but not available at ward level)

15.1 General Health

Respondents of the 2001 Census were asked whether their overall health over the last 12 months had been good, fairly good or not good. Table 15-1 shows the results for the project area and for England and Wales. In the project area 64% of people reported that their health was good, compared with 69% in England and Wales.

Table 15-1: General Health, 2001

	Project Area		England & Wales	
Good health	50841	64%	35676210	69%
Fairly good health	19004	24%	11568363	22%
Not good health	9034	11%	4797343	9%
All people	78879	100%	52041916	100.0%

Source: Census of Population and Housing 2001

15.2 Disability Living Allowance

Disability Living Allowance (DLA) replaced and extended Attendance Allowance and Mobility Allowance from 1st April 1992. It is paid to people who become disabled before the age of 65. DLA is payable to people who are disabled and need help with personal care, mobility, or both.

DLA is split into two components, care and mobility, each with three bands, which can be paid separately or together depending on the needs of the individual. In order to qualify for either, claimants have to meet specific medical conditions.

Eight percent of residents in Sparkbrook and Washwood Heath claim disability allowance, compared with 5% in England and Wales. Seventeen percent of claimants in the four wards are aged 16 or under, compared with 11% in England and Wales.

Table 15-2: Disabled living allowance claimants, 2002

	Nechells	Small Heath	Sparkbrook	Washwood Heath	England & Wales
All people aged 5-64 (2001)	22245	27789	22554	21702	40635001
All Claimants Total	1385	1650	1880	1755	2126175
% of people aged 5-64	6.2%	5.9%	8.3%	8.1%	5.2%
Higher Rate Care Component Claimants	355	425	485	400	475178
Middle Rate Care Component Claimants	430	575	610	585	671909
Lower Rate Care Component Claimants	390	430	570	475	544990
Higher Rate Mobility Component Claimants	750	855	990	955	1338859
Lower Rate Mobility Component Claimants	395	480	575	530	500201
Male Claimants	715	810	955	905	1078380
Female Claimants	675	845	920	855	1047795
Claimants Aged 16 and under	255	305	290	295	235260
Claimants Aged 17-59	705	830	1015	890	1108140
Claimants Aged 60 and over	430	520	575	575	782775

Source: The Office of National Statistics *www.statistics.gov.uk*

15.3 Incapacity Benefit

Incapacity Benefit replaced Invalidity and Sickness Benefit from 13 April 1995. It is paid to people who are assessed as being incapable of work and who meet the appropriate contribution conditions.

The number of claimants in each ward in 2002 is shown in Table 15-3. A high percentage of the claimants in the four wards are aged less than 30; 14% compared to 9.7% in England and Wales, and fewer claimants are aged 60 or over.

Table 15-3: Incapacity benefit claimants, 2002

	Nechells	Small Heath	Sparkbrook	Washwood Heath	England & Wales
All Claimants Total	1720	1870	2250	1925	2104281
Claimants Aged under 30	270	230	290	295	203459
Claimants Aged 30-39	380	410	475	345	364159
Claimants Aged 40-49	435	490	585	500	478168
Claimants Aged 50-59	445	515	640	555	755975
Claimants Aged 60 and over	190	235	255	230	302520
Male Claimants	1105	1215	1525	1245	1309219
Female Claimants	615	660	720	675	795062
Total No of Dependents of Claimants	305	415	415	415	161664
Dependents of Claimants Aged under 5	60	60	55	65	19986
Dependents of Claimants Aged 5 - 10	90	115	135	135	50398
Dependents of Claimants Aged 11 - 15	100	140	140	145	63904
Dependents of Claimants Aged 16-19	55	100	90	75	27376

Source: The Office of National Statistics *www.statistics.gov.uk*

Additional sources of data that can be used for the inner city study to extract national and regional health data include the following (some of which will also provide road traffic accident data):

West Midlands public health observatory (www.wmpho.org.uk/observatory)

Eastern Birmingham Primary Care Trust (covering Washwood Heath and Bordesley Green wards) (www.easternbirminghampct.nhs.uk)

Heart of Birmingham Primary Care Trust (covering Small Heath, Nechells and Sparkbrook wards) (www.hobtpct.nhs.uk)

Annual public health reports – Eastern Birmingham PCT and Heart of Birmingham PCT

National Electronic Library for Health (www.nelh.nhs.uk)

West Midlands Information Service for Health (www.wish-uk.org)

West Midlands accident and emergency surveillance data – providing data for Heartlands Hospital and Birmingham Children's Hospital – available from the University of Birmingham (www.pcpoh.bham.ac.uk/publichealth/aec)

West Midlands Health GIS service (www.wmpho.org.uk/gis)

Neighbourhood statistics (www.neighbourhood.statistics.gov.uk)

16 Deprivation

It is important to understand the implications that poverty has in the target area and therefore it is useful to consider the levels of deprivation experienced by the residents who live in the inner city of East Birmingham. There are a variety of deprivation indices currently in use which have been developed to meet a range of different objectives (the Townsend Material Deprivation Score, the Jarman Underprivileged Area Score, the Index of Multiple Deprivation (IMD) and others). In general, deprivation indices "measure the proportion of households in a defined small geographical unit with a combination of circumstances indicating low living standards or a high need for services, or both" (Bartley and Blane 1994). The Index of Multiple Deprivation 2004 (IMD, 2004) was constructed by the Social Disadvantage Research Centre (SDRC) at the Department of Social Policy and Social Research, University of Oxford, for the Office of the Deputy Prime Minister (ODPM) and is used in this section to evaluate the inner city area studied in this project.

The Index of Multiple Deprivation 2004 (IMD, 2004) is a measure of multiple deprivation at the small area level. The model of multiple deprivation which underpins the IMD 2004 is based on the idea of distinct dimensions of deprivation which can be recognised and measured separately and are experienced by individuals living in an area. People may be counted in one or more of the domains, depending on the number of types of deprivation that they experience. The overall IMD is conceptualised as a weighted area level aggregation of these specific dimensions of deprivation.

The IMD 2004 contains seven domains of deprivation (the weighting of each domain is shown in brackets):

- Income deprivation (22.5%)
- Employment deprivation (22.5%)
- Health deprivation and disability (13.5%)
- Education, skills and training deprivation (13.5%)
- Barriers to Housing and Services (9.3%)
- Crime (9.3%)
- Living environment deprivation (9.3%)

Each domain contains a number of indicators. The criteria for inclusion of these indicators are that they should be 'domain specific' and appropriate for the purpose (as direct as possible measures of that form of deprivation), measuring major features of that deprivation (not conditions just experienced by a very small number of people or areas), up-to-date, capable of being updated on a regular basis, statistically robust, and available for the whole of England at a small area level in a consistent form. A full list of the indicators is given in Appendix C.

The scores and rankings are compiled at various levels (Super Output Areas and Local Authority areas), however they are not currently scored or ranked in terms of wards. It has, however, been possible to calculate the scores and ranks at ward level and they are shown below.

The following table shows the levels of deprivation experienced by the wards in the inner city project area, and for comparison those levels at government region, local authority and for the whole of England.

Table 16-1: Summary of Scores (Indices of Multiple Deprivation 2004)

	Nechell	Small Heath	Spark-brook	Wash-wood Heath	Inner City Total	Birmingham Total	West Midland Total	England Total
TOTAL FOR 7 DOMAINS								
Average Score	**55.99**	**50.07**	**61.76**	**59.26**	**56.68**	**37.46**	**24.80**	**21.67**
StdDev of Score	11.34	7.77	7.91	8.97	9.88	17.57	16.27	15.74
INCOME								
Average Score	0.42	0.37	0.48	0.41	0.42	0.25	0.16	0.14
StdDev of Score	0.11	0.07	0.07	0.09	0.09	0.15	0.12	0.12
EMPLOYMENT								
Average Score	0.23	0.19	0.29	0.24	0.24	0.16	0.12	0.11
StdDev of Score	0.07	0.03	0.08	0.05	0.07	0.08	0.07	0.07
HEALTH								
Average Score	1.24	1.02	1.45	1.22	1.23	0.71	0.22	0.00
StdDev of Score	0.21	0.23	0.35	0.30	0.32	0.55	0.71	0.90
EDUCATION								
Average Score	54.47	46.86	51.14	61.45	53.22	32.04	26.59	21.69
StdDev of Score	14.42	10.04	8.63	10.88	12.05	20.81	20.99	18.78
HOUSING								
Average Score	29.80	29.21	29.16	26.55	28.65	27.16	19.52	21.69
StdDev of Score	3.70	2.70	2.54	2.71	3.10	4.79	10.04	10.95
CRIME								
Average Score	0.93	0.52	0.81	0.96	0.79	0.63	0.12	0.00
StdDev of Score	0.38	0.49	0.58	0.36	0.49	0.45	0.74	0.84
LIVING ENVIRONMENT								
Average Score	50.01	63.01	50.34	68.37	58.30	43.11	24.51	21.69
StdDev of Score	19.39	11.17	14.06	8.90	15.49	19.49	18.48	16.73

The IMD gives each area a total score and a score for each domain – a higher score denotes a more deprived area

The total scores, covering all seven domains, demonstrate that the Birmingham inner city area has a very high deprivation score (56.68) when compared with the score for Birmingham (37.46), West Midlands (24.80) and particularly the average for the whole of England (21.67). According to the scores, Sparkbrook is considerably more deprived than Small Heath (which has the lowest score of all four wards within the inner city area).

The IMD 2004 also ranks each Super Output Area (SOA)[4], based on their scores, where 1 is the most deprived. In order to relate this ranking to the inner city area, the SOAs have been grouped into wards and ranked accordingly. The following table shows the ranking for the four wards in the inner city area within Birmingham, the West Midlands and England.

Table 16-2: Summary of Ranks (Indices of Multiple Deprivation 2004)

	Nechell	Small Heath	Spark-brook	Wash-wood Heath	Total in Set
Rank in Birmingham	4	6	1	2	39
Rank in West Midlands	5	12	1	2	730
Rank in England	72	164	42	51	7170

[4] Geographical units developed by The Office for National Statistics (ONS) which are aggregates of Census Output Areas.

The rankings show that the four wards that make up the inner city area fall into the top 3% of most deprived wards in England. Within the West Midlands they fall into the top 2% and within Birmingham they are in the top 16% of most deprived wards. It should be noted that Sparkbrook emerges as the most deprived ward in Birmingham and in the West Midlands, and is ranked 42nd most deprived ward in the whole of England.

The Indices of Multiple Deprivation are re-calculated every four years, therefore it will only be possible to repeat this analysis in 2008. Nevertheless, the IMD will provide an aggregate dataset to effectively monitor impact in the study area both during the six year study, and especially subsequent to the implementation of road safety interventions in the ICSDP area.

17 Social Capital

Social capital consists of the networks, norms, relationships, values and informal sanctions that shape the quantity and quality of society's social interactions. Robert Putnam describes social capital as:

"…features of social life – networks, norms and trust-that enable participants to act together more effectively to pursue shared objectives … Social capital in short refers to social connections and the attendant norms and trust" (Putnam, 1995)

Social capital can contribute to a range of beneficial economic and social outcomes including: high levels of growth of GDP, more efficiently functioning labour markets; higher educational attainment; lower levels of crime; better health; more effective institutions of government.

The levels of social capital are determined by a range of factors. The key ones appear to be: history and culture, whether social structures are hierarchical, the family, education, the built environment, residential mobility, economic inequalities and social class, the strength and characteristics of civil society and patterns of individual consumption and personal values.

Essentially there are three main components of social capital:
Social networks (who knows who)

Social norms (informal/formal rules that guide how network members keep to the rules)

Sanctions (processes that help to ensure that network members keep the rules)

Recent work has also distinguished three main types of social capital (Aldridge et al, 2001; Narayan, 1999):

Bonding (strong bonds among family members or among ethnic groups)

Bridging (weaker ties, business associates, acquaintances, friend of a friend)

Linking (Connections of different levels of power or social status e.g. links between political elite and general public and between individuals from social classes).

Research has shown that higher levels of social capital are associated with better health, higher educational achievement, better employment outcomes, and lower crime rates (ONS, 2003). In other words, those with extensive networks are more likely to be "housed, healthy, hired and happy" (Woolcock, 2001). All of these areas are of concern to both policy-makers and community members alike.

In the UK policy context the concept of social capital is sometimes employed almost as the obverse of social exclusion (Fahmy, 2004). Social capital is thus understood as a collective resource which facilitates community development, and as a framework for evaluating general 'quality of life' issues (Roberts & Roche, 2001).

Table 17-1 highlights how different themes under the umbrella term of 'social capital' can be measured in subsequent years of the project. In addition to these, the harmonised question set developed by the Office for National Statistics (ONS, 2003) for use in local and national surveys can be used for collection of base line data on social capital issues, and in the annual monitoring survey (please refer to Appendix C).

Table 17-1 Measuring Social Capital

Theme	Measurement
Participation, social engagement, commitment	Participation or involvement in local groups
	Perceived barriers to involvement in local groups
	Level/intensity of involvement in local groups
	Participation in voluntary schemes connected with work
	Membership of clubs/groups e.g. RSPCA, WWF
	Political activity or voting
	Taking positive action about a local issue
	Participation in religious activity
	Completed or received a practical favour
	Provide regular service, help or card for others
	Familiarity with neighbourhood
Control, self-efficacy	Perceived control over community affairs
	Perceived control over own health
	Perceived control which organisation have
	Satisfaction with amount of control over life
	Perceived rights and responsibilities of citizens
	Perceived influence over political decisions
	Perceived satisfaction with life
	Measures of psychological control or empowerment
Perception of community level structures of characteristics	Satisfaction/enjoyment of living in local area
	Degree to which societal-level variables are seen as relevant to health
	Rating of local noise problems
	Rating of cleanliness, graffiti, vandalism
	Rating of area resources and services (leisure activities, rubbish collection)
	Rating of health services
	Rating of socio-economic inequality
	Rating of education services
	Rating of crime, safety, victimisation
	Availability of good local transport
	Feeling of safety in the neighbourhood
	Rating of facilities for children
Social interaction, social networks, social support	Proximity of friends/relatives
	Contact with friends/family/neighbours: quality or frequency
	Perceived barriers to contact with friends/relatives
	Has someone to rely upon outside of household
	Received practical help/advice for bringing up children
	Depth of socialisation networks
	Depths of socialisation networks, specifically leisure
	Perceived norms of social support
	Social relations at work
Trust, reciprocity, social cohesion	Satisfaction with level of information about local area issues
	Length of residence in area/neighbourhood
	Confidence in institutions and public services
	Trust in other people
	Perceived fairness of life, including discrimination
	Confidence in political structures
	Social trust
	Perception of shared values, reliability

The Attitude survey, produced by the Social Research Associates for the Inner City Safety Demonstration Project in July 2004, documents perceptions of socio-economic and cultural factors

experienced by inhabitants of Washwood Heath, Sparkbrook, Small Heath and Nechell. The survey covers some aspects associated with social capital including:

- Levels of crime, graffiti and racism in the neighbourhood
- Access to leisure pursuits, friends and relatives, and places of worship
- Perceptions of road safety, personal safety and policing in the neighbourhood

Crime was considered to be an overwhelming problem by survey respondents, in particular drugs, graffiti, mugging and car theft. Leisure and play facilities were reported to be lacking in the survey area and a perceived threat towards personal safety was high, with homes being secured by metal bars across doors and windows. Personal safety and security was in part responsible for a large proportion of people finding it difficult to travel to wards outside the project boundary, especially due to safety concerns (42%) and security concerns (44%). Arguably, given that almost half of the people surveyed were reported as confining themselves to the wards in which they live, the wards under survey can be considered to have low social capital. There would appear to be an inherent lack of social capital in the survey areas, in particular the societal 'norms' that give people a sense of security in their neighbourhood.

The report provides anecdotal evidence supporting the survey responses, especially with respect to children being fearful of playing in local parks and being intimidated by local gangs, and hence creating a road safety hazard by playing in the street. In addition, 80% of people felt that policing was inadequate.

Community severance exacerbated by crime, inaccessibility and isolation appears to reduce people's capacity to generate and maintain social capital and related networks, kinships and friendships. This was evidenced by people living in a sheltered accommodation complex in Small Heath who felt trapped by their social environment and lack of crossing facilities (SRa, 2004). Despite problems of severance, the attitude survey found that 23% of respondents travel outside the project area for leisure activities, 17% for visiting friends and relatives, and 12% for worship.

Aldridge et al (2001) indicate that social capital may contribute to lower levels of crime by:

Helping to promote norms and values that discourage criminal behaviour

Strengthening community ties by providing sanctions against those who disregard accepted norms of behaviour e.g. through shaming and interventions by neighbours, known as 'social control theory' (Sampson et al, 1997).

An important element of social capital is the extent to which communities are provided with institutional support from the state and private sector. The attitude survey reported that "information about the Council, administrative areas and responsibilities is noticeably lacking." Appropriate communication was also shown to be deficient. Survey recipients complained of too much written material generated by the authorities, despite there being high illiteracy rates in the area, and word of mouth being the primary means of communication.

There are no hard and fast rules about whether a survey area has 'high' or 'low' social capital, especially since the responses given by target communities are subjective and based on individual perceptions of the neighbourhood. Results from the social capital module of the General Household Survey 2000 investigated five main aspects of social capital, including civic engagement, neighbourliness, social networks, social support and perception of the local area. The social capital module reported that people's perceptions of where they live have been used in other surveys to measure the level of social capital in an area, including the British Household Panel Survey and the Health and Lifestyle survey.

Data from the social capital module was aggregated by region in England, Scotland and Wales. Perception of the local area and experience of crime in the West Midlands for each variable was found to be worse than the average for all regions as seen overleaf. However, the West Midlands can be

regarded as having a higher level of social capital with regard to local facilities compared with the North West (of which 42% of respondents gave a low local facilities score) and with local problems in the North East (of which 42% of respondents gave a high local problems score). Certainly, the report indicates that those who feel happy, safe and secure with the environment they live in are likely to have higher levels of social capital than those who perceive their area negatively.

	West Midlands	Average for all regions
• Enjoys living in the area	83%	87%
• Low local facilities score[5]	37%	34%
• High local problems score[6]	34%	34%
• Feels safe walking in dark	14%	15%

17.1 Quality of life

The British Social Attitudes Survey series, conducted annually by the National Centre for Social Research since 1983, measures the changing attitudes, values and beliefs of the British public covering an extensive number of complex social, political and moral issues.

With regard to people's quality of life in the wards under survey, a 'community satisfaction index' was produced as part of a household survey undertaken in Washwood Heath, Small Heath and Nechells in 2001 by the Prime Focus Regeneration Group (Gulliver, 2002). The index provided a six-point scale to gauge satisfaction of the following characteristics:

- The home
- The neighbourhood
- Community safety
- Local health services
- Local facilities and services
- Transport

Of these satisfaction index characteristics, 16% of respondents were found to be 'very dissatisfied' with the neighbourhood, and 15% with community safety, while 22% and 15% of the sample were 'very satisfied' with the home and local health services respectively. Overall, 60% of residents were reported to be satisfied with their community, with a quarter of respondents registering dissatisfaction. Suggested improvements to quality of life by respondents included:

- Better financial security
- Less crime/greater security
- Better health
- Improvements to homes
- More public/open space

For monitoring and evaluation of social capital issues in subsequent years of the project, the baseline survey can be modified to incorporate questions from the ONS social capital question set (please refer

[5] The local facilities score was created by converting the values of different variables (including social and leisure facilities, health facilities, local schools, police and transport) to a scale with a score ranging from zero to one. These scores were then divided into 3 equal groups, and people in the bottom third were described as having a low local facilities score.

[6] The local problems score was created by converting the values for different variable (including traffic speed and volume, street parking, car crime, rubbish, graffiti, alcohol and drug use etc) to a scale with a score ranging from zero to one. These scores were then divided into 3 equal groups, and people in the top third were described as having a high local problems score.

to Appendix D), and results from the surveys can draw on the attitude survey undertaken in each year of the project. In addition, there may be merit in devising a simple visual exercise to derive information on social capital issues from participants for whom English is not their first language. This approach may only be suitable in a focus group format, and not for household interviews because its principle purpose is to obtain consensus on the issues presented.

In summary, the impact of the inner city study, and in particular the implementation of road safety interventions, is most likely to affect the level of social capital in the target wards through:

- Reduced traffic speed and congestion
- Improved parking provision and enforcement
- Improved street safety and security
- Facilitate greater movement between wards
- Increase social trip-making for leisure and religious activities, and in support of friendships and kinships

Since one of the complaints found in the attitude survey was that social capital was lacking with respect to institutional support, the very process of conducting an attitude survey incorporating a social capital question set, will provide the community with a voice, and in doing so improve their communication with the local authorities and raise their institutional social capital.

The inner city study area is comprised of multi-ethnic communities (70% of the population are from minority ethnic groups, see Table 5.2) characterised by strong social bonds. It is recommended that the study focus its attentions on strengthening and 'bridging' social capital between the eleven different ethnic groups residing in the area. The study can facilitate this process by encouraging key groups in the community (such as faith groups, welfare groups and neighbourhood forums) to consult one another on road safety concerns and in identifying appropriate interventions to be implemented by the study. Through collective decision-making on a controversial issue that affects the entire community, discussion of road safety solutions can unite the heterogeneous community.

The ONS social capital question set featured in Appendix D should be used as part of the annual attitude survey undertaken by SRa in subsequent years of this project. Additional sources of data that can be used to extract national social capital data for comparison with the social attitude survey include the following eighteen surveys that were identified by the Office of National Statistics as including some measurement of social capital.

(www.statistics.gov.uk/socialcapital/downloads/soccapmatrix.pdf):

- British Crime Survey
- British Election Study
- British Household Panel Survey
- British Social Attitudes Survey
- Citizen Audit Questionnaire
- Communal Establishments Survey (pilot)
- English Longitudinal Study of Ageing
- English House Condition Survey
- General Household Survey
- Youth Lifestyles Survey
- Health Education Monitoring Survey
- Health and Lifestyles Survey
- Health Survey for England
- Home Office Citizenship Survey
- National Adult Learning Survey
- Scottish Household Survey
- Survey of English Housing
- Poverty and Social Exclusion Survey
- UK Time Use Survey
- Families and Children Survey

18 Stakeholder Analysis

Birmingham City Council have adopted a "bottom-up" approach to the study, whereby local people will be given greater responsibility for determining what is required from the transport infrastructure to support a thriving stable community with low deprivation and low unemployment, while recognising that the outcome needs to be sustainable, achievable and safe. Informed consultation with local people and communities is at the heart of the project. It is Birmingham's view that given the right guidance and information, local people are best placed to say what interventions will not only improve safety, but at the same time will help to improve their accessibility to the four key services which the Government consider have the greatest impact on life opportunities – jobs, health-care, learning and food shops, and also help to improve other quality of life issues.

The public participation will aim to enable local people to determine what issues need to be addressed by the project, leading subsequently to an action plan, involving non-transport as well as transport interventions, and involving other agencies and partners, e.g. Police, health care, environmental services, education services. This will involve a much higher level of public involvement than normal, and if successful, should help to demonstrate that local people can play a much greater role in complex decision making on local issues that directly affect them.

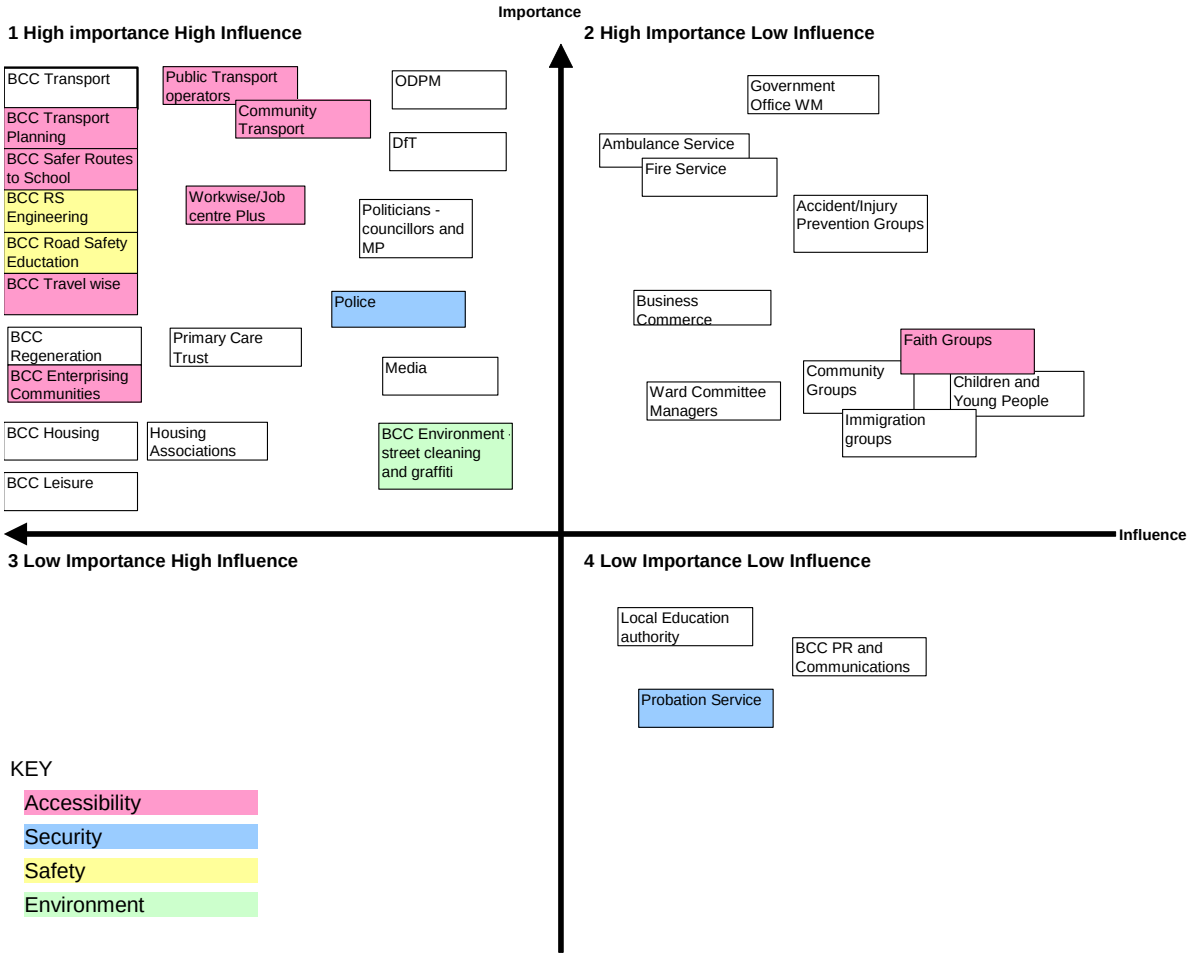
Identification of the inner city study stakeholders and beneficiaries and their involvement in decision making and strategy development for the study is an important component of the project in order to secure the 'buy-in' and support of the target communities. A selection of stakeholders will be required to act as gatekeepers to facilitate access to specific community groups, and especially those that are considered vulnerable (children, the elderly, physically impaired, asylum seekers and people for whom English is not their first language). The stakeholders and beneficiaries were identified by TRL in association with BCC and Babtie, along with their relative importance and relevance to the study.

The list of stakeholders comprises people who are resident in the study area, people who commute from outside and work in the study area, and departments of Birmingham City Council, other civil service departments (e.g. housing associations), NGO's and the private sector.

The stakeholder analysis matrix in Figure 18-1indicates the different stakeholder groups identified for the study with their relevant importance to and influence on the project. Other stakeholders to be considered include:

- Schools and colleges
- Hospitals, health centres, health visitors, health promotional material
- Individual community/voluntary groups
- Citizen's Advice Bureau
- Welfare groups
- Highway maintenance
- Neighbourhood forums
- BCC equalities officer
- Playgroups
- Local strategic partnerships

Figure 18-1 Stakeholder Analysis Matrix



Stakeholders contribute to or are affected by a project or programme's performance (Laws *et al*, 2003). Stakeholders can be defined as a person or group of people who have a vested interest in, or who can influence the success of a development project and the environment in which it operates. Primary stakeholders are those that are directly affected by an activity (the desired beneficiaries of a project and the implementing agencies), and secondary stakeholders are indirectly affected by the activity (non-beneficiaries, such as irregular road users).

The principle of stakeholder analysis is that different stakeholder groups are managed according to their level of influence on the project outcomes. Hence, key players are those with a high level of influence and high interest in the project, while stakeholders that appear to have low influence and power require continuous monitoring in case they oppose any project objectives. These might include pressure groups or NGOs whose influence can grow and become a potential threat.

18.1 BCC's Strategy for Stakeholder Analysis

Birmingham City Council's key strategy for undertaking stakeholder analysis can be summarised as follows (please refer to Appendix A) for a Gantt chart itemising the timescale of activities):

The strategy is based on this principle that the public who live, work or drive through the area need to influence and support the project from inception, throughout and beyond the formal end date. This is the only way to ensure that the objectives of the project are met and sustained.

However, this does not mean that the public can have a blank remit. There are technical, financial and legal constraints which will require a dialogue between the public, stakeholders, local members and Government. Priorities, tradeoffs, compromises and, on occasion, conflict will need to be addressed and enabled by the public involvement and communication strategy.

The public are not to be asked what they want, but what they want to achieve (for example, even reducing vehicle speeds can be approached in different ways, and traffic calming (the usual request) may not be the appropriate solution when the wider issues are taken into consideration). With this approach, the nature of stakeholder / partner involvement can take a different form. Stakeholders and partners can be approached with what the public want to achieve, supported with the data and evidence from the attitude survey, and asked what they are able to contribute to (or are already doing) towards achieving the publics aims. Stakeholder / partner involvement will become very focused, with the result that the public can then be informed of what measures are available (and what are not).

The participation will be an iterative process whereby the interventions are developed through an ongoing process, rather than a single event or initiative. The public can be presented with what actions the stakeholders and partners have to offer, together with any constraints e.g. financial limits, enabling them to determine a programme of prioritised transport and non-transport interventions.

An essential element of the work is to disseminate and create transferability to others beyond the project area both in Birmingham and elsewhere in the UK. This will apply to the whole project but in particular to the innovative public involvement and communication approach which will inform others who often find this aspect of road safety policy particularly difficult.

BCC anticipate that the following strategy for public involvement and communication will take place before the end of the 2004/2005 financial year.

Discussion Groups - October/November 2004

Ten discussion groups will be held at which participants will focus on their quality of life priorities and their vision for the project area. The context for the vision will have three dimensions – transport objectives as set out in the shared priorities, the West Midlands Local Transport Plan and other quality of life factors, transport network functions, and the needs of different transport user groups. This perspective will enable us to understand current problems, future aspirations and how both link with road safety issues. The discussions will also act as a check on the results from the Stage One research and throw further light on priorities and trade-offs in the context of the problems identified. Another consideration will be perceptions of rights and duties which we need to understand if we are to build up the social capital which is an important input to meeting the project objectives.

Each group will involve around 20 people selected to represent a cross-section of people in that category and from the project areas, but will not include stakeholders. Between them they will involve 200 people representing the diversity of the project area.

Stakeholder Meetings (December 2004 – January 2005)

The results of the discussion groups would be summarised and used to inform meetings with stakeholders. A wide range of stakeholders and partners is envisaged, including many of those approached for the Audit of Prior Consultation together with the relevant District Committees, District Managers, Ward Members, and the Local Strategic Partnerships. Some of the stakeholders will be approached as individuals before the most appropriate final groupings for meeting are settled.

The Stakeholders will be asked to comment on the problems, priorities and trade-offs identified by the public. An important focus will be to understand the extent to which public perceptions match with those of stakeholders. We will also discuss this in the context of reactions to the information maps.

The aim for the stakeholder meetings is ultimately to identify what each stakeholder can, and cannot, offer in the way of actual intervention.

An output from this round of consultation will be to create a core advisory group. In addition it will encourage other liaison groups according to the needs of the project. These grouping are likely to change over time as different aspects of the project take centre stage.

Launch (February / March 2005)

At this point, a meeting which brings together the "players" – the stakeholders and partners who will be directly contributing to the project together with the representatives of the local communities - will help to engender a sense of purpose, ownership and co-operation for all involved, and provide a platform for taking the project forward to the development and implementation of the action plan. This should be a high profile event with appropriate media coverage.

A newsletter and associated press releases would be tools for this event. The format for the event is still to be decided but it could be a community based event – perhaps an ecumenical service, announcement of quick wins or even a series of events such as major street cleaning initiative (council plus community) or 'reclaim the streets', together with a conference. The project by this time will need 'branding' and the associated design work carried out in preparation.

19 Discussion and Conclusions

The large amount of data available for the Inner City project area have made it difficult to provide an overall picture of the area. However, some themes can be drawn out.

The area covers parts of four wards, all of which are significantly disadvantaged in comparison to the rest of Birmingham, and to the rest of England; all four wards in the project area had a total IMD score greater than 50, compared with 37 for the whole of Birmingham and 21 for the whole of England. The four wards fall into the top 3% of the most deprived wards in England. Sparkbrook is the most deprived ward in the project area, and is ranked 42 out of 7,170 wards in England.

The DfT casualty target now includes not only the targets to reduce the overall numbers of killed or seriously injured (KSI) casualties and child casualties but also a target to secure a greater reduction in the overall number of road casualties in deprived wards than for England as a whole. Success in casualty reduction in the ICSDP area will help to deliver on this target.

At the start of the project, the area of the covered Washwood Heath ward and parts of Nechells, Sparkbrook and Small Heath wards. In September 2004, the ward boundaries were changed. The project area now comprises of the whole of Washwood Heath and Bordersley Green wards, plus parts of Nechells, South Yardley and Hodge Hill wards. The data in this report refers to the wards as they were at the start of the project. Some of the wards names are the same, but now refer to different areas, so care should be used when making comparisons to data in this report for wards. Any data available at the lower COA level should remain unaffected.

Most of the data used in the Baseline Report are available for other areas which could be used as controls when assessing the effects of changes implemented as part of the project. Comparisons are possible with other Local Authority wards (within Birmingham, and in other parts of England) or with England or GB data as a whole. Within Birmingham, the most suitable wards are Aston, Handsworth and Soho, which are in the top ten most deprived wards in Birmingham, and have similar proportions of children and ethnic mix.

A Street Audit was undertaken by Steer Davies Gleave for BCC. This involved external auditors scoring zones on litter, graffiti, repair of buildings, general attractiveness and personal security. There are relatively few areas of the project area which were judged to be attractive, which is not surprising as litter, vandalism and general repair of buildings are also problem areas. Personal security is also a large problem in many areas, but can often be linked with the appearance of an area, since in some areas the actual street crime rate was low, but personal security was scored as ‘very unsafe’. If the streets were tidied up, it may help people feel safer and also create a feeling of ownership, encouraging the community to take responsibility for maintaining the cleanliness of the streets. Crime, litter and youth gangs were also mentioned as bad things about the area in the Attitude survey.

The census data gives a basic picture of the area. The area has a large number of young people (33% are under 16) and is predominantly non-white, with people of Pakistani origin making up the largest group. A majority (58%) state their religion as Muslim, with a significant (28%) Christian population, and a mix of other religious groups. This makes the role of church leaders a key factor in developing a positive programme of change in the area.

The area includes a large number of people claiming to have no formal qualifications on their census return (52% of 16-74 year olds, compared with 29% of this age group in England and Wales as a whole).

Car ownership is relatively low with almost 50% of households having no car or van (compared with 27% for England and Wales as a whole). Despite this, over 50% of those in employment travel to work as either the driver or passenger in a car or van. The number of unlicensed vehicles observed the streets on during the attitude survey or mentioned by the residents surveyed implies that there may be more vehicles available to people in the area than the census data shows. This is something on which local police may be able to provide more detailed information.

A quarter of residents travel to work by bus compared with 7.4% in England and Wales.). The attitude survey showed that while most bus services were judged to be good, there were some services which were perceived as unreliable, especially in the evenings. This indicates a strong need to concentrate future initiatives on non-car modes of transport, particularly the bus, and particularly those services running to the North East of the project area, where there are many jobs (see section 11). It may be that there is already a good public transport system in place to the North East of the project area because there is a strong need, however this may be to the detriment of other parts, and so an analysis of public transport services should be undertaken and reviewed throughout the term of the project. The impact of introducing new services should also be examined, including physical and psychological changes.

A high number of households in the area have dependant children, and a quarter of these are lone parents. School programmes may be a fruitful way to access these households. Contact may also be possible via Health Visitors and doctors' surgeries.

Young TransNet will be a useful source of data on travel to school, and the number of schools taking part needs to be monitored. There were four schools that took part in 2003/04.

Unemployment is relatively high in the area. In the wards covered by the project area between 7% and 11% of those aged 16-59 years are claiming Job Seekers Allowance (compared to less than 3% across England and Wales). This suggests that Job Centres might provide a way of reaching a group which may not otherwise be easy to reach for education and information initiatives.

The majority of all casualties in the area were drivers or passenger in cars. However over half of the child casualties were pedestrians. More detailed data on these accidents is needed to establish whether better play facilities, or better pedestrian links between homes and places children wish to visit, would reduce this toll.

The quality and type of the housing stock in the area will impact on the availability of safe places for children to play. Much of the housing is in terraced rows and many of these houses have minimal or no front gardens. More data on where children play may be available from the Street Audit process as the project progresses. Overcrowding in houses is also a large problem.

Problems with some of the parks as 'no-go' areas because of drugs etc were highlighted by the Attitude survey. Involvement of green space initiatives such as the Groundwork Trust may be a way of increasing the use of these spaces and thus reducing the potential risks of playing in the streets.

Social capital consists of the networks, norms, relationships, values and informal sanctions that shape the quantity and quality of society's social interactions. The inner city study area is comprised of multi-ethnic communities characterised by strong social bonds. It is recommended that the study focus its attentions on strengthening and 'bridging' social capital between the eleven different ethnic groups residing in the area. The study can facilitate this process by encouraging key groups in the community (such as faith groups, welfare groups and neighbourhood forums) to consult one another on road safety concerns and in identifying appropriate interventions to be implemented by the study. Through collective decision-making on a controversial issue that affects the entire community, discussion of road safety solutions can unite the heterogeneous community.

The ONS social capital question set should be used as part of the annual attitude survey undertaken by SRa in subsequent years of this project

In summary, the following issues were highlighted as key findings from data available in the ICSDP study area, and areas that require attention for the remainder of the project:

- The wards of the ICSDP area are significantly disadvantaged in terms of the Index of Multiple Deprivation 2004
- The ICSDP area has a younger than average population (particularly those under 30 years old) compared with the average for England and Wales and has an extremely large minority ethnic population (70% minority ethnic)
- The majority of people in the area give their religious affiliation as Muslim

- The ICSDP area has a higher than average proportion of lone parents with dependent children, compared to the average for England and Wales.
- Less than half of the ICSDP area population (47.5%) own or have access to a car or van (compared with 26.8% in England and Wales
- A high number of pupils at schools in the area speak an additional language, and a high percentage of pupils are eligible for free school meals.
- Performance in KS2 is lower than average for three quarters of the primary schools in the area,
- 52% of the population aged 16 to 74 in the project area have no qualifications, and in nine census output areas, over 60% of people do not have any qualifications.
- A fifth of people in the project area aged between 16 and 74 have never worked, compared with 3% in England and Wales. Of those who do work, half work in routine or semi routine occupations
- Between March 1999 and February 2004, 16 people were killed, 222 people seriously injured and 2,438 people seriously injured in road accidents in the project area (Stats19 data
- 11% of casualties were child pedestrians and cyclists.
- There is a high incidence of 'hit and run' accidents in the project area.
- Most of the pedestrians injured who were crossing the road were not using a crossing, and were often masked by a vehicle
- For children aged less than 11, 85% of casualties were not making school journeys. For 11-15 year olds, 37% of casualties were on a school journey.
- Excessive speed was a contributory factor in 3% of accidents. Careless/thoughtless/reckless and inattention were the most common factors.
- Personal security is a large problem in many parts of the ICSDP area

Table 19-1 indicates what additional data is required to complete the baseline picture of the study area, and where it might be obtained. This data should be monitored annually throughout the project to measure impact on the beneficiaries, and an evaluation be undertaken at the end of the project and subsequently to ensure that positive impact is continuous and transferable to other wards in Birmingham, and indeed the whole of Britain. Some of the data can only be accessed from project partners, such as the police, once partnerships have been forged with BCC. Other data needs to be obtained and analysed by BCC and also UWE.

Table 19-1 ICSDP Gap Analysis

Type of data	Purpose	Source
Traffic flow data	To allow calculation of accident rates	BCC
Accidents	Further information from police records if necessary	Police
Crime data	To compare with public perception	Police
Unlicensed vehicle data and vehicle offences	To relate to accident data	Police
Hospital casualty data	To permit accident matching and increase knowledge of casualty levels	Local hospitals
Media data	To monitor impact of project	See Appendix E
Social capital data	To build pattern of social capital levels	Annual Attitude surveys
The street environment	Information acquired from Steer Davies Gleave, but definition of zones (1-6) need clarification	• BCC
Demographics	To compare with census data	Special surveys, or annual attitude survey
Religious affiliation	To compare with census data	Special surveys, or annual attitude survey
Migration	To compare with census data	Special surveys, or annual attitude survey
Travel	Accessibility planning information Public transport usage	• BCC • Centro via BCC
Education	Post 16 staying on rates	DfEE
Employment		
Health	• Index of multiple deprivation health domain: for 4 wards, Birmingham, and England and Wales • Limiting long term illness for 4 wards, Birmingham, and England and Wales • Severe disablement allowance claimants in England and Wales for 4 wards, Birmingham, and England and Wales • Hospital episode statistics for Birmingham 1999/2000 by age and gender, (but not available at ward level)	• UWE (Liz Towner)
Young TransNet	Travel to school information	Web site

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General Reference web sites

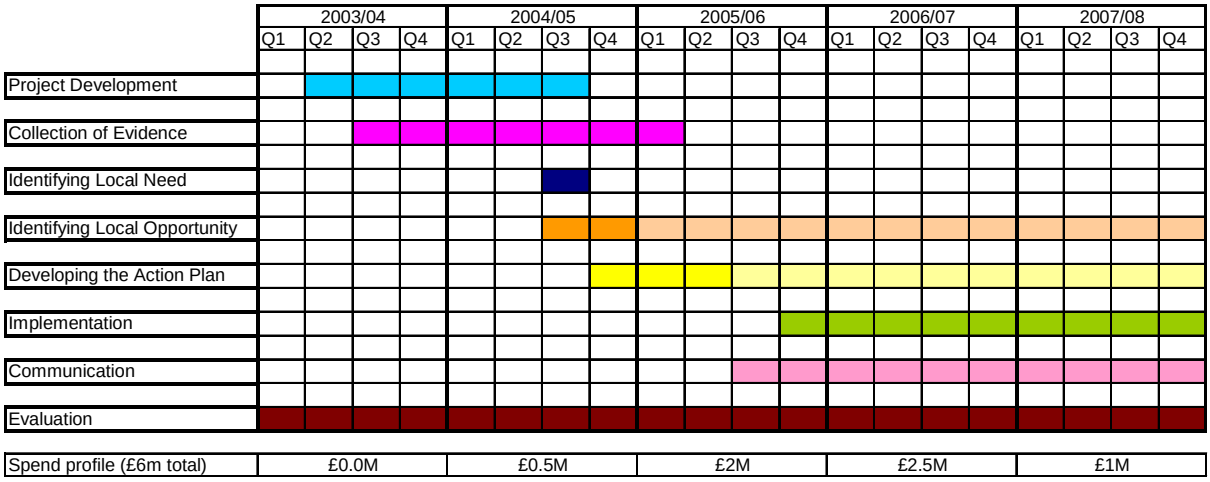
Social exclusion unit	http://www.socialexclusion.gov.uk	General Information on Social Exclusion
IDeA	http://www.idea.gov.uk/knowledge	Acts as the first port of call for local government in terms of information on performance, practice and innovation. Through providing examples of good practice, delivered through case studies, tools and other materials from across the sector, in addition to community discussion forums, IDeA Knowledge is about connecting local authorities in England and Wales so that methods of best practice can be shared..
Audit commission	http://www.audit-commission.gov.uk/	Best value performance indicators and comprehensive performance assessment. It has also got some tool kits/advice on local authority service audits and engaging local diverse communities.
ODPM	http://www.odpm.gov.uk	
Home office – Crime stats	http://www.homeoffice.gov.uk/crime/	Local Crime statistics
Neighbourhood renewal unit	http://www.neighbourhood.gov.uk/	
Health Poverty Index	http://www.hpi.org.uk/	The index will be a series of indicators-eventually between 30-50 different indicators including a mix of outcome and input measures such as access to sports facilities, free school meals and health survey based data.
National statistics	http://www.statistics.gov.uk/default.asp	
2001 census questionnaire	www.statistics.gov.uk/census2001/pdfs/cenews44.pdf	A specimen 2001 census form can be downloaded.
NeSS (Neighbourhood statistsics	http://neighbourhood.statistics.gov.uk/Default.asp?nsid=false&CE=True&SE=True	Summary statistics, Detailed tables, Interactive map,
WM observatory	http://www.wmro.org/servlet/Main	Holds a range of data
BCC – City strategic Partnership	http://www.birmingham.gov.uk/GenerateContent?CONTENT_ITEM_ID=16277&CONTENT_ITEM_TYPE=0&MENU_ID=11643&EXPAND=315	Here is the link for the City Strategic Partnership who have an overall strategy for Birmingham re Housing renewal etc.
BCC – community safety	http://www.birmingham.gov.uk/GenerateContent?CONTENT_ITEM_ID=1309	This link directs you to the Birmingham Community Safety

Partnership	&CONTENT_ITEM_TYPE=0&MENU_ID=13355&EXPAND=122 http://www.birmingham-csp.org.uk/	Partnership which contains crime data etc.
BCC-Best Value	http://www.birmingham.gov.uk/GenerateContent?CONTENT_ITEM_ID=23175&CONTENT_ITEM_TYPE=0&MENU_ID=587&EXPAND=279	Best Value information (now just called 'Performance Plan') is available at this link:
Government Office for the West Midlands	http://www.go-wm.gov.uk/cru/	Information on the Crime Reduction and Social Inclusion teams,.
Library of Local Performance Indicators	• http://www.local-pi-library.gov.uk/library.shtml • Community cohesion • Community development provision • Concern with the locality and/or public issues • Effectiveness of community representation • Extent and effectiveness of community and voluntary organisations • Level of volunteering/community activity • Social Capital • Social economy • Social inclusion • The responsive authority	Community involvement The indicators listed below all relate to **Community involvement**. If you are interested only in specific aspects of **Community involvement**, the following sub-topic areas are available to view
Birmingham and Black Country Strategic Health Authority	http://www.bbcha.nhs.uk/.	
Birmingham chamber of commerce	http://www.bci.org.uk/	
Birmingham Voluntary Services Council	http://www.bvsc.org/	

Local government performance	http://www.bvpi.gov.uk/pages/index.asp	
Birmingham economy	http://www.birminghameconomy.org.uk/	
WM Fire service	http://www.wmfs.net/home.xtml;jsessionid=98B940FB678684D9EEB8B36DA79871CB	
WM Police	http://www.west-midlands.police.uk/	
Young TransNet	http://www.youngtransnet.org.uk/portal/birmingham.asp	
Public transport - Centro	http://www.centro.org.uk/Maps/level3/birmingham/f7.asp http://www.centro.org.uk/wwwroot/CorpInfo/Annual%20Stats%202002-2003.pdf	
Developing partnerships Audit Commission	http://ww2.audit-commission.gov.uk/comsafe/2_0.html	The new community safety partnerships must tackle a wide range of criminal and anti-social behaviour. Crime and general disorder affects the whole community and has an adverse effect on people's lives. No single organisation can hope to reduce the incidence of crime and tackle the underlying causes of criminal and anti-social behaviour. Local organisations need to work together to develop comprehensive solutions which achieve a permanent improvement to the community's quality of life.

Appendix A. Birmingham City Council Gantt Chart

This Gantt chart shows the time scales proposed by Birmingham City Council for delivery of the INRSDP



Appendix B. Accuracy and Precision of Census Results

2001 Population Census in Birmingham
(Information from Birmingham City Council)

Although the Census is the most comprehensive source of data about the population, results should not be regarded as wholly accurate or precise. This is for a number of reasons:

- Not all people were covered by the Census
- Some people did not answer all questions
- Some answers given may have been incorrect
- To protect the confidentiality of individuals and households the Census Agency (National Statistics) has:
    - Swapped some records between similar Census areas
    - Modified some published results

Under enumeration

Although Censuses aim to be comprehensive, in practice it is not possible to achieve complete response from the whole population. National Statistics initially estimated that 91% of the population in Birmingham had been recorded by the Census survey.

The 2001 Census adopted a new strategy to deal with this. The actual Census survey was followed by an independent sample coverage survey. This sought to provide estimates of the numbers and characteristics of people and households that had not been captured by the Census survey itself. The published Census results are based largely on actual Census Forms but include an element of estimation based on the follow-up survey. The results were meant to represent the whole population. Because the published Census results are estimates, error levels can be used as a guide to accuracy. Birmingham's 95% Confidence Interval for the whole population is +/- 1.9% or a total of 18,565. This means that National Statistics are confident that the true population lies between 958,535 and 995,665. The population for Birmingham of 977,100 is the mid-point of this range.

However the Census produced population figures that were lower than had been expected both nationally and in many local areas, including Birmingham. Research is ongoing but in November 2003, National Statistics already indicated that the Census population nationally and in a number of areas, was too low. As a result National Statistics issued revised estimates for the 2001 Mid-Year population estimate, in Birmingham's case the population was revised by +9,500 taking the resident population to 985,900. The Census results will not be adjusted.

Question Non-Response and inaccurate answers

In a number of cases the returned Census Forms were incomplete, with not all questions answered. The level of non-response in Birmingham as a whole varied, the non-response rate for household questions was between 3.3% and 7.6%, for people questions it was between 0.5% and 21.2%. With the exception of the optional Religion question, National Statistics 'imputed' answers in such cases. This makes tables easier to interpret but introduces a further element of estimation.

A separate issue is where an answer on a Census Form is incorrect due to misinterpretation of the question or for some other reason. Some inaccuracies were screened out during the data processing stage by comparing answers to different questions: for example to identify cases where someone under 16 was recorded as married. Inevitably this means that many incorrect answers were not

detected. A possible example is house type. The 2001 Census shows a noticeable smaller number of terraced houses than the 1991 Census and a similarly greater number of semi-detached houses. It is possible this may reflect differences in the way this question was answered. In 1991 the Census Enumerator recorded house type, whereas in 2001 the household representative did so.

Modification of Published Results to protect confidentiality

Census tables are designed so that the confidentiality of individuals and households is not compromised.

- Where the number of cases in a particular category in a table is small, the National Statistics published figure may have been adjusted.
- Totals and subtotals in tables are calculated on the sum of the adjusted data.
- Tables are independently adjusted, therefore counts for the same population in two different tables may be different.
- Tables for higher geographies are independently adjusted, and therefore may not be the sum of lower constituent geographies.

Modifications are least likely to occur in published tables for the City of Birmingham, simply because of the number of people in the City.

In contrast modifications are likely to occur in most tables for the smallest area for which Census Tables are produced – the Output Area. The target size for an Output Area was 125 households. There are 3,127 Output Areas in Birmingham. The average size is 125 households, but the least number of households in an Output Area is 53, and the greatest is 259.

The Key Statistics Tables contain small numbers of categories and are subject to less modification. However, some distortions in results are apparent in Key Statistics for Output Areas.

Firstly, the sum of results for Output Areas in the City will not necessarily match results that are available at City level. For example, the City-wide version of Table KS02 gives an overall population of 977,087 compared with 977,232 from the sum of Output Areas. The overall differences at City level are small, but variations may be larger when Output Areas are aggregated into 'User defined areas'.

Secondly, totals for the same variable may not match in different tables; e.g. the total population in table KS02 may not match the total population from table KS01. This may cause minor problems in compiling reports or profiles drawn from a number of tables. All Output Areas have the same total for certain of the household and population tables: KS01 and KS08 for population and KS16, KS19 and KS21 for households.

Confidentiality modifications to results are more likely in CAS and CAS Theme tables because they contain cross tabulations providing finer breakdowns of the population. Univariate tables which contain many categories (e.g UV004 – single years of age) are also likely to contain modifications.

Conclusion

Census results should not be regarded as precise measurement, in interpreting Census results care must be taken to avoid making spurious conclusions about small differences between areas and group.

Appendix C. Indices of Multiple Deprivation

Indicator Details[7]

1. Adults and children in Income Support households
2. Adults and children in Income Based Job Seekers Allowance households
3. Adults and children in Working Families Tax Credit households whose equivalised income (excluding housing benefits) is below 60% of median before housing costs
4. Adults and children in Disabled Person's Tax Credit households whose equivalised income (excluding housing benefits) is below 60% of median before housing costs
5. Adults and children in households in receipt of National Asylum Support Service (NASS) assistance
6. Unemployment claimant count (JUVOS) of women aged 18-59 and men aged 18-64 averaged over 4 quarters
7. Incapacity Benefit claimants women aged 18-59 and men aged 18-64 (SOA level)
8. Severe Disablement Allowance claimants women aged 18-59 and men aged 18-64
9. Participants in New Deal for the 18-24s who are not included in the claimant count
10. Participants in New Deal for 25+ who are not included in the claimant count
11. Participants in New Deal for Lone Parents aged 18 and over
12. Years of Potential Life Lost (YPLL)
13. Comparative Illness and Disability Ratio (CIDR)
14. Measures of emergency admissions to hospital, derived from Hospital Episode Statistics
15. Measure of adults under 60 suffering from mood or anxiety disorders
16. Average points score of children at Key Stage 2 (end of primary)
17. Average points score of children at Key Stage 3
18. Average points score of children at Key Stage 4 (GCSE/GNVQ- best of eight results)
19. Proportion of young people not staying on in school or school level education above 16
20. Proportion of those aged under 21 not entering Higher Education (SOA level)
21. Secondary school absence rate
22. Proportions of working adults (aged 25-54) in the area with no or low qualifications
23. Household overcrowding
24. Percentage of households for whom a decision on their application for assistance under the homeless provisions of housing legislation has been made
25. Difficulty of Access to owner-occupation
26. Road distance to GP premises
27. Road distance to a supermarket or convenience store
28. Road distance to a primary school
29. Road distance to a Post Office
30. Burglary
31. Theft
32. Criminal damage

[7] The English Indices of Deprivation 2004 (Appendix B)
http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_029534.pdf

33. Violence
34. Social and private housing in poor condition
35. Houses without central heating
36. Air quality
37. Road traffic accidents

Appendix D. Social Capital Data Collection

Recommended Question Set

These questions were development by the Office for National Statistics (www.statistics.gov.uk/socialcapital/project.asp) as a harmonised question set for collection of base line data on social capital issues. The questions provide a consistent measurement of social capital. The question set can be administered to each recipient in approximately 20 minutes. The questions highlighted in blue provide an abridged set of questions that can be administered in around 5 minutes.

Views about the area

1. How long have you lived in this area?
   1 Less than 12 months
   2 12 months but less than 2 years
   3 2 years but less than 3 years
   4 3 years but less than 5 years
   5 5 years but less than 10 years
   6 10 years but less than 20 years
   7 20 years or longer
   8 Don't know

2. How satisfied are you with this area as a place to live?
   1 Very satisfied
   2 Fairly satisfied
   3 Neither satisfied nor dissatisfied
   4 Slightly dissatisfied
   5 Very dissatisfied
   6 Don't know

Views about the neighbourhood

I would like to ask you a few questions about your immediate neighbourhood, by which I mean your street or block.

3. In general, what kind of neighbourhood would you say you live in – would you say it is a neighbourhood in which people do things together and try to help each other, or one in which people mostly go their own way?
   1 Help each other
   2 Go own way
   3 Mixture
   4 Don't know

4. To what extent do you agree or disagree that this neighbourhood is a place where people from different backgrounds get on well together?
   1 Definitely agree
   2 Tend to agree
   3 Tend to disagree

4 Definitely disagree
5 Don't know
6 Too few people in the neighbourhood
7 All same backgrounds

5. Would you say that:
1 Most of the people in your neighbourhood can be trusted
2 Some can be trusted
3 A few can be trusted
4 No one can be trust
5 Just moved to the neighbourhood
6 Don't know

Problems in the neighbourhood

6. Suppose you lost your (purse/wallet) containing your address details, and it was found in the street by someone living in this neighbourhood. How likely is it that it would be returned to you with nothing missing?
1 Very likely
2 Quite likely
3 Not very likely
4 Not likely at all
5 Don't know

I am going to read out a list of problems which some people face in their neighbourhood. For each one, please can you tell me how much of a problem it is.

7. How much of a problem are people being drunk or rowdy in public places?
1 Very big problem
2 Fairly big problem
3 Not a very big problem
4 Not a problem at all
5 It happens but it's not a problem
6 Don't know

8. How much of a problem is rubbish or litter lying around?
1 Very big problem
2 Fairly big problem
3 Not a very big problem
4 Not a problem at all
5 It happens but it's not a problem
6 Don't know

9. How much of a problem are vandalism, graffiti and other deliberate damage to property or vehicles?
1 Very big problem
2 Fairly big problem
3 Not a very big problem
4 Not a problem at all
5 It happens but it's not a problem
6 Don't know

10. How much of a problem are people using or dealing drugs?
    1 Very big problem
    2 Fairly big problem
    3 Not a very big problem
    4 Not a problem at all
    5 It happens but it's not a problem
    6 Don't know

11. How much of a problem is people being attached or harassed because of their skin colour, ethnic origin or religion?
    1 Very big problem
    2 Fairly big problem
    3 Not a very big problem
    4 Not a problem at all
    5 It happens but it's not a problem
    6 Don't know

12. How much of a problem are teenagers hanging around on the street?
    1 Very big problem
    2 Fairly big problem
    3 Not a very big problem
    4 Not a problem at all
    5 It happens but it's not a problem
    6 Don't know

13. How much of a problem are troublesome neighbours?
    1 Very big problem
    2 Fairly big problem
    3 Not a very big problem
    4 Not a problem at all
    5 It happens but it's not a problem
    6 Don't know

Participation in local issues

To what extent do you agree with the following statements:

14. I can influence decisions affecting my local area?
    1 Strongly agree
    2 Agree
    3 Neither agree nor disagree
    4 Disagree
    5 Strongly disagree
    6 Don't have an opinion
    7 Don't know

15. By working together, people in my area can influence decisions that affect the local area?
    1 Strongly agree
    2 Agree
    3 Neither agree nor disagree
    4 Disagree

5 Strongly disagree
6 Don't have an opinion
7 Don't know

16. In the last 12 months have you taken any of the following actions in an attempt to solve a problem affecting people in your local area?
1 Contacted a local radio station, television station or newspaper
2 Contacted the appropriate organisation to deal with the problem, such as the council
3 Contacted a local councillor or MP
4 Attended a public meeting or neighbourhood forum to discuss local issues
5 Attended a tenants' or local residents' group
6 Attended a protest meeting or joined an action group
7 Helped organise a petition on a local issue
8 No local problems
9 None of the above
10 Don't know

Participation in national issues

17. In the last 12 months have you taken any of the following to show your concern over a national issue?
1 Contacted a radio station, television station or newspaper
2 Contacted the appropriate organisation to deal with the problem
3 Contacted an MP
4 Attended a public meeting
5 Attended a protest meeting or joined an action group
6 Helped organise a petition
7 None of the above
8 Don't know

18. Did you vote:
1 In the last general election (national election)?
2 In the last local council election?
3 Did not vote in either election
4 Not eligible to vote in either
5 Don't know

Trust

19. Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?
1 Most people can be trusted
2 Can't be too careful in dealing with people
3 It depends on people/circumstances
4 Don't know

20. For each of the following please can you tell me how much you trust them:
The police
The courts (Magistrates Courts and Crown Court)
Parliament

Local council
1 A lot
2 A fair amount
3 Not very much
4 Not at all
5 No experience
6 Don't know

Contacts with friends, relatives and neighbours (social networks and support)

21. How often do you:
Speak to relatives on the phone?
Speak to friends on the phone?
Speak to neighbours (face-to-face)?
Meet up with relatives who are not living with you?
Meet up with friends?
Write a letter or note to relatives?
Text or email relatives, or use chat rooms on the internet to talk to relatives
Write a letter or note to friends?
Text or email friends, or use chat rooms on the internet to talk to friends
1 On most days
2 Once or twice a week
3 Once or twice a month
4 Less often than once a month
5 Never
6 Don't know

Social support

22. I am going to describe two situations where people might need help. For each one, could you tell me if there is anyone you could ask for help? (if there is more than one person in the household, please include people living inside and outside the household)
1 You are ill in bed and need help at home. Is there anyone you could ask for help?
Yes/No
2 You are in financial difficulty and need to borrow some money to see you through the next few days. Is there anyone you could ask for help?
Yes/No

23. If you said yes, who could you ask for help in each situation?
1 Husband/wife/partner
2 Other household member
3 Relative (outside household)
4 Friend
5 Neighbour
6 Work colleague
7 Voluntary or other organisation
8 Other
9 Would prefer not to ask for help
10 Don't know

24. If you had a serious personal crisis, how many people, if any, do you feel you could turn to for comfort?

Involvement in groups, clubs and organisations

The next questions are about involvement in groups, clubs and organisations. These could be formally organised groups or just groups of people who get together to do an activity or talk about things. Please exclude just paying a subscription, giving money and anything that was a requirement of your job.

25. In the last 12 months, have you been involved with any groups of people who get together to do an activity or to talk about things? These could include evening classes, support groups, slimming clubs, keep-fit classes, pub teams and so on.

Yes/No

26. If you said yes, which of these categories best describe the groups you have taken part in?
1 Hobbies/social clubs
2 Sports/exercise groups, including taking part, coaching or going to watch
3 Local community or neighbourhood groups
4 Groups for children or young people
5 Adult education groups
6 Groups for older people
7 Environmental groups
8 Health, disability and welfare groups
9 Political groups
10 Trade union groups
11 Religious groups, including going to a place of worship or belonging to a religious based group
12 Other group
13 None of these
14 Don't know

27. In the last 12 months, have you taken part in any (other) group activities as part of a local or community group, club or organisation? These could include residents' associations, sports groups, parent-teacher associations, schools or religious groups etc.

Yes/No

28. If you said yes, which of these categories best describe the groups you have taken part in?
1 Hobbies/social clubs
2 Sports/exercise groups, including taking part, coaching or going to watch
3 Local community or neighbourhood groups
4 Groups for children or young people
5 Adult education groups
6 Groups for older people
7 Environmental groups
8 Health, disability and welfare groups
9 Political groups
10 Trade union groups
11 Religious groups, including going to a place of worship or belonging to a religious based group
12 Other group
13 None of these
14 Don't know

29. In the last 12 months, have you taken part in any (other) group activities as part of a national group, club or organisation? These could include pressure groups, charities, political groups, environmental groups etc.

30. If you said yes, which of these categories best describe the groups you have taken part in?
    1 Hobbies/social clubs
    2 Sports/exercise groups, including taking part, coaching or going to watch
    3 Local community or neighbourhood groups
    4 Groups for children or young people
    5 Adult education groups
    6 Groups for older people
    7 Environmental groups
    8 Health, disability and welfare groups
    9 Political groups
    10 Trade union groups
    11 Religious groups, including going to a place of worship or belonging to a religious based group
    12 Other group
    13 None of these
    14 Don't know

Unpaid help to groups

31. During the last 12 months have you given any unpaid help to any groups, clubs or organisations in any of the following ways?
    1 Raising or handling money/taking part in sponsored events
    2 Leading the group/member of a committee
    3 Organising or helping to run an activity or event
    4 Visiting people
    5 Befriending or mentoring people
    6 Giving advice/information/counselling
    7 Secretarial, administrative or clerical work
    8 Providing transport/driving
    9 Representing
    10 Campaigning
    11 Other practical help (e.g. helping out at school, religious group, shopping)
    12 Any other help
    13 None of the above
    14 Don't know

32. Would you say you give this kind of help:
    1 At least once a week
    2 At least once a month
    3 At least once every three months
    4 or less often
    5 Other
    6 Don't know

33. How many times in the last 12 months have you given unpaid help through a group, club or organisation?

34. Some people have extra responsibilities because they look after someone who has long-term physical or mental ill health or disability, or problems due to old age. Is there anyone living with you who is sick, disabled or elderly whom you look after or give special help to, other than in a professional capacity (e.g. a sick, elderly or disabled relative/husband/wife/child/friend/parent etc

Yes/No

35. In the past month have you given any unpaid help that does not include groups, clubs or organisations in any of the following ways?
    1 Domestic work, home maintenance or gardening
    2 Provision of transport or running errands
    3 Help with child care or babysitting
    4 Teaching, coaching or giving practical advice
    5 Giving emotional support
    6 Other
    7 Don't know

36. In the past month have you received any unpaid help that does not include people who live with you, or from groups, clubs or organisations in any of the following ways?
    1 Domestic work, home maintenance or gardening
    2 Provision of transport or running errands
    3 Help with child care or babysitting
    4 Teaching, coaching or giving practical advice
    5 Giving emotional support
    6 Other
    7 Don't know

Additional Questions

1. Indicate whether the following have improved, remained the same or worsened over the last five years (tick as appropriate):

	Improved	Remained same	Worsened
Police presence in the neighbourhood			
Civic service provision (street lighting, rubbish collection, street cleaning etc)			
Quality and quantity of road safety measures			
Quality and quantity of road safety education			
Availability of community associations and social groups			
Condition of local roads and pavements			
Condition of local leisure and sports facilities			
Social activity *between* ethnic/religious groups			

2. Have you been involved in public decision-making related to the following in the last 12 months:

1 Location of public services (schools, health centres, libraries, leisure centres)

2 Construction of public buildings, structures and roads

3 Appointment of local councillors, Mayors and MPs

4 Demolition of public or heritage buildings

Appendix E. Media Monitoring of Road Safety in Birmingham: Action Plan

E.1 The Brief

To identify if local newspapers or radio stations have reported safety issues in the area and determine what are the main issues that have been covered (in terms of number of stories, column inches or air time). Long term monitoring will be a BCC task.

E.2 Suggested Methodology

E.2.1 Targeting the Right Media

Before decisions are made on how to monitor media in the ICSDP area it is important to identify the types of media providing information to the residents of the area. There are a number of ways that this information could be discovered, and these are listed below:

- Questions could be included in focus groups with residents, already being carried out as a general consultation exercise for this project.
- Questions could be put to Neighbourhood Groups, when they are set up.
- A questionnaire could be sent out to parents at local schools, asking them what type of media they regularly take in.

The project could be given to a local school to take on (perhaps a 6th form class).

E.2.2 Specific Research Questions

The main purpose of the task is to find out to what extent the issue of road safety is covered in the media in Birmingham. It is particularly important to identify road safety issues specific to the area of Birmingham being studied in the Inner City project.

The following questions need to be answered:

- What road safety issues are covered?
- How is it covered (who is reporting it)?
- Where is it covered (type of media)?
- How much of it is covered compared to other stories (number of stories, column inches, airtime etc)?
- Who are the stories available to? Who actually reads/hears the stories?

E.2.3 Existing BCC Processes

Birmingham City Council already undertakes regular monitoring of their involvement in the media. They use a company called City Press which monitors newspapers and local radio for anything that involves or mentions the City Council. This company provides a press cutting service on all local, regional and national newspapers and also monitors the local BBC radio station (main news, mornings, drive time and the Ed Doolan Show).

This current process only covers searches directly involving the council, therefore would not cover general road safety issues in the City. It may be possible to extend what the Council currently covers to incorporate road safety in the future.

E.2.4 Media Monitoring Services

There are number of media monitoring companies whose business it is to monitor the media based on certain criteria given to them by their customers. These companies monitor a range of media including newspapers, radio and television broadcasts and the internet. Some of these companies simply produce press cuttings and tapes of broadcasts for the customer to analyse, whilst others will evaluate the material as part of their contract (and charge accordingly).

The types of information that can be reported on by one company are listed below[8]:

- The volume, OTS and AVE of coverage
- The tone of reporting (positive, negative and neutral)
- Key message penetration
- Issues analysis
- Tone of reporting by media group, medium and journalist
- Trends of coverage and benchmarking
- Proactive vs. reactive coverage
- Audience breakdown by age, gender and socio-economic group

E.2.5 Methodology Consideration

To be credible, media monitoring must be thorough and comprehensive. The team doing the monitoring will have to be familiar with all the languages being broadcast or written, which is particularly important in the ethnically diverse part of Birmingham that is being targeted.

There are three different types of monitoring[9]:

1) Quantitative Analysis

This involves measuring the number of items devoted to road safety, as well as how long they are (whether in time or in column inches). It can also involve counting and identifying the sources of stories which is important as an objective measure of balance. It would also be possible to count the number of different issues within road safety, by grouping stories (e.g. road safety and children, car accidents, education, public opinion etc). The time of day when the stories are broadcast is also an important issue to determine how important the issues are considered (i.e. does it make the main evening news?)

2) Qualitative Analysis

Counting alone will not adequately explain the strengths and weaknesses of media coverage. More media coverage does not always indicate that a story is being taken seriously or given importance; the type and quality of the coverage is also important. Therefore the content of the story must also be analysed to see how the issue is being portrayed, including an analysis of bias.

[8] TNS Media Intelligence
[9] http://www.aceproject.org/main/english/me/med02c01.htm

3) Discourse Analysis

It is important, albeit often difficult, to evaluate the messages contained within media. This includes subtleties of language and visuals that convey a message that is understood by the audience, but sometimes not in a conscious manner. This can be most clearly shown in the use of words, whether in print or broadcast e.g. using the word 'alleges' rather than 'states' or the use of highly charged words such as 'horrific' or reporting on certain things to sway reader's/listener's opinion. When monitoring television broadcasts symbols, camera angles and logos can also have a subtle impact on the viewer.

The following media types have been identified to monitor in Birmingham:

1) Newspapers (stories, editorials, letters)
2) Radio (news, discussion programmes)
3) Local TV channels (news programmes, possibly via the internet)
4) Council newspaper (The Birmingham Voice)

The extent to which each of these is monitored is largely cost dependent, therefore this task should be viewed in terms of minimum and maximum requirements (the more that is monitored, the higher the cost implications will be).

As a minimum, the monitoring should cover local newspapers and the council newspaper. At the other extreme it would also monitor local radio stations and would include local television news programmes. In terms of the analysis, monitoring should be split into three geographical areas:

1) Area specific to the project
2) Out of area but still in Birmingham
3) Outside of Birmingham

It is suggested that the monitoring process be broken down into different levels of coverage:

- Primary reporting (front page newspaper, top story in broadcast)
- Secondary reporting (page 2 onwards in newspaper, other news in broadcast) and
- Other reporting (letters from the public, relevant community meeting adverts).

There are various ways of obtaining this data. It is possible that media could be monitored continuously for a fixed period (eg 2 months), in which case it would seem sensible to contract this to a media monitoring company who have the facilities to monitor intensely (particularly with radio and television broadcasts). Alternatively, the monitoring could take place over a longer time period, for example one week each month for eight months. The advantage of this method is that the monitoring could take place in-house as it would not be so resource dependant, and might cover a wider variety of road safety issues that arise over a longer time period. The decision for which method to use will largely depend on cost and timescales for reporting.

How should it be monitored?

Birmingham City Council (BCC) currently use a company called City Press to collect press cuttings where the council is mentioned in local and national newspapers. These cuttings are managed electronically and automatically sent to interested parties (e.g. Members etc). It would be possible to use this service to also collect cuttings that are relevant to road safety issues; however it would effectively have to be managed as a separate exercise. BCC do not currently monitor radio programmes, therefore this would need to be arranged, though City Press do not offer this service.

As an alternative to an official monitoring exercise, which could prove quite costly, there are other ways that we may be able to establish whether the profile of road safety is raised throughout the project. These are noted below:

Ask questions as part of the annual household survey (e.g. have residents noticed an increase or decrease in road safety coverage in the press).

Ask Neighbourhood Groups, to monitor the press they read or listen to (ask them to keep press cuttings or note down topics discussed on the radio).

How should it be reported?

It is suggested that the monitoring process be broken down into different levels of coverage:

Primary reporting (front page newspaper, top story in broadcast)

Secondary reporting (page 2 onwards in newspaper, other news in broadcast) and

Other reporting (letters from the public, relevant community meeting adverts).

E.2.6 Costs[10]

Press Cutting Service

In order to obtain an idea of costs for this process, City Press[11] were contacted and asked to quote for the work described above. The following provides a brief outline of the costs:

Table E.1: Costs for the monitoring of press cuttings

Description	Cost (per month)
Scan national press for articles relevant to road safety in Birmingham	£120
Adding the West Midlands, regional daily and weekly press	£20
Adding UK regional press and trade press	£20
Supply of articles in summary form from major foreign titles	£50
TOTAL (per month)	£210

The press and publications department at BCC would have no budget to cover these extra costs; therefore the money would have to be found elsewhere.

Extra costs would be incurred if an analysis of the cuttings was required and a separate company would need to be employed.

Radio Monitoring

In order to obtain an idea on costs of monitoring radio stations, TNS Media Intelligence were contacted and asked to quote for monitoring the radio stations covering Birmingham. The following

[10] These costs are designed to be an indicator only, of costs for each process. When this work is commissioned, it is recommended that a number of quotes be considered to ensure suitability and cost effectiveness.
[11] City Press are the press cutting company that Birmingham City Council currently uses.

radio channels are already monitored by TNS Media Intelligence during the morning show, lunchtime chat show and drive time show:

- BBC Radio West Midlands
- BBC Asian Network
- BRMB
- Capital Gold
- Galaxy 102
- Heart 100.7
- Excel 1296

Costs are charged per relevant piece forwarded to the client (e.g. BCC) and therefore it is very difficult to predict how much this exercise will cost; costs will differ month by month depending on how many relevant pieces are found. Costs per piece are noted below (delivered within 3-4 working days):

Table E.2: Costs for the monitoring of radio

Description	Cost
Full transcript of an individual piece, length 0-2 minutes	£66
Full transcript of an individual piece, length 2-6 minutes	£138
Full transcript of an individual piece, length 6-10 minutes	£199
Audio/video of an individual piece, length 0-15 minutes	£110
Audio/video of a compilation of pieces, length 0-15 minutes each	£110 for first piece £55 per subsequent piece £15 DVD/CD surcharge

Analysis & Reporting

Press Cuttings

City Press work closely with a company called Target Media Group who could provide a monthly analysis report from the press cuttings that City Press provide. There are two options with two different associated costs and these are detailed in the table below.[12]

[12] These costs are approximations and may vary depending on the number of cuttings.

Table E.3 : Options for the analysis of press cuttings

Option1	Option2
Overall analysis report Publication breakdown with number of items and sq cm size (Table and/or chart) Issue analysis breakdown Total items per issue (Table and/or chart) Total sq cm size per issue (Table and/or chart) Number of specific text references (Table and/or chart) Number of specific picture references (Table and/or chart) Media pack preparation Clipping sorting, and bespoke presentation mounting	As Option 1, plus Press release analysis Defining press release key messages (up to 6), matching, scoring and reporting (Table and/or chart) Weighting analysis Positive/negative weighting (Table and/or chart) Media source and demographic information Statistical information for publisher, demographic and readership statistics where available (Table and/or chart)

Table E.4 : Costs for the analysis of press cuttings

Description	Cost ex VAT (per month)
Option 1	£525
Option 2	£875

Radio Media

Costs for the analysis and reporting of radio media will be very dependant on the number of relevant pieces or transcripts received from the monitoring company. Target Media Group has provided an estimation of costs (in addition to their charges for analysing the press cuttings, as detailed above).

The prices above (for the analysis and reporting of press cuttings) are quoted in terms of Option 1 and Option 2. The estimated costs for the analysis and reporting of radio media is related to these options.

Table E.5 : Costs for the analysis of radio media

Description	Press Cutting Cost ex VAT (per month)	Radio Media Cost ex VAT (per month)	TOTAL Cost ex VAT (per month)
Option 1	£525	+ £175	£700
Option 2	£875	+ £280	£1,155

E.3 Recommendations

The monitoring process is the responsibility of BCC. It is recommended that a two month snapshot of newspaper coverage should be undertaken by City Press looking at Birmingham only. This should be reviewed after the end of the monitoring period to determine whether an annual survey of this type is appropriate. The introduction of a media monitoring element to the work of the Neighbourhood Groups is likely to be the most cost effective method of obtaining information about non-newspaper coverage. It is assumed that the Road Safety Department of BCC will have access to media coverage of accidents as part of their normal work.